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I.—Examination of some points of Buddhist Chronology. By the Hon.

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While the question of the authenticity of Buddhistical chronology, developed in Pali annals, subsequent to the advent of Sa'kya Sinha, is under the consideration of the Committee of Papers of the Asiatic Society, I beg to offer a few observations on the Chronological Table appended to Professor Wilson's Essay on the Hindu History of Cashmir, called the Rája Tarangini, published in the XVth volume of the Asiatic Researches.

The first portion of this history, compiled by Kalha'na Pandit commences with the fabulous ages; it is represented to extend to A. D. 1024; and the author is reputed to have flourished about Saka 1070, or A. D. 1148.

Before tabularizing and adjusting the chronology comprised in that history*, Professor Wilson gives the following details regarding the reign of the monarch Aso'ka.

"The last of these princes (Sachinara) being childless, the crown of Cashmir reverted to the family of its former rulers, and devolved on Asóka, who was descended from the paternal great uncle of Khayendra. This prince, it is said in the Ayen Acberi, abolished the Brahminical rites, and substituted those of Jina; from the original however it appears, that he by no means attempted the former of these heinous acts, and that, on the contrary, he was a pious worshipper of Siva, an ancient temple of whom in the character of Vijayésa he repaired. With respect to the second charge, there is better foundation for it, although it appears that the prince did not introduce, but invented or originated the Jina Sásana. He is said to have founded a city called Srinagar, a different place,

^{*} Want of space must excuse our inserting these tables, which will be accessible to all our readers in our Chronological and Genealogical Appendix.—ED.

however, from the present capital, which is attributed to a much later monarch. In the reign of Asóka, *Cashmir* was overrun by the *Mlech'has*, for whose expulsion the king obtained from *Siva* a pious and valiant son, as a reward for the austerities he had practised *.''

"JA'LOKA, the son and successor of Asóka, was a prince of great prowess: he overcame the assertors of the Bauddha heresies, and quickly expelled the Mlech'has from the country, thence named Ujjhita dimba: he then carried his victorious arms to foreign regions, and amongst others to the north of Persia, which he subjugated in the reign of Darab, and then proceeding in an opposite direction, he subdued the country of Canonj."

"The successor of this celebrated monarch was DAMODARA, of whose descent various opinions were entertained."

"Damodara was succeeded by three princes who divided the country, and severally founded capital cities named after themselves. These princes were called Hushka, Jushka, and Canishka, and these appellations are strongly corroborative of an assertion of our author, that they were of Turushka, that is, of Turk or Tartar extraction: they are considered as synchronous, but may possibly be all that are preserved of some scries of Tartar princes, who, it is very likely, at various periods, established themselves at Cashmir. The chief event recorded of their reign is the foundation of the three several capitals, named after themselves, but another and more important consequence of their sovereignty is said to have been the almost entire change of the national faith, and the nearly exclusive prevalence of the doctrines of the Bauddhas under a Bodhisatwa or heirarch named Na'ga'runa. The period at which this took place is said to have been 150 years before the death of Sa'kya Sinha."

"The Tartar princes were succeeded by Abhimanya, a monarch evidently of a Hindu appellation, and a follower of the orthodox faith, which he reestablished in Cashmir."

In elucidation of the date assigned to the age in which Na'GA'R-JUNA lived, Professor Wilson adds the following appendix. The Sanscrit quotation, which (if I have correctly read it) is here represented in Roman, is there given in Déva-nágari characters.

* The faith of Asóka is a matter of very little moment, as the prince himself is possibly an ideal personage: as, however, the comparative antiquity of the Buddha and Brahminical creeds in Cashmir has been supposed to be affected by it, and the events subsequently recorded, it may be advisable to give the passages of the original, which shew that Asóka was a worshipper of Siva: it is not impossible, however, if we are to attach credit to any part of this portion of the Cashmirian history, that he permitted heretical, possibly Bauddha doctrines, to be introduced into the kingdom during his reign from his Tartar neighbours.

"Then the prince Asóka, the lover of the truth, obtained the earth; who sinning in subdued affections, produced the Jena Sásana." This may mean possibly something very different from the received idea, and may imply his neglect of affairs of state through excess of devotion, and his consequently nmitting to prevent the intrusion of a foreign power, rather than a foreign faith, into the kingdom, the expulsion of which was the object of his son's birth.—
[Note by Professor Wilson.]

"Appendix No. 7, to Professor Wilson's Essay.

"The passage in the text adverted to (page 23) requires a little consideration, both as to its meaning and the chronological views to which it has already given rise. The text of the original runs thus:—

Té Turushkánwayódbhútá pi punyásrayá nripáh Sushkakshétrádi déséshu mathachityádi chakriré. Prájyé rájyakshané teshán, práya Kasmíramardalam bhójyamasté sawauddhánam pravrajyorjíta téjasam. Tató Bhagawatah Sa'kya Sinhasya puranirvrité asmin saha lókdhatau sárdham varshasatam hyagát Bódhisatwascha désésmin néka bhuméswaró bhut, sacha Na'ga'rjunah srímán shadarhatwa na sanşrayé.

"There are in this passage some obvious inaccuracies, and some compounds of a purport absolutely unknown to the most learned Brahmans. Taking it as it stood, it appeared to involve the position that the Turushka princes preceded SA'KYA SINHA by above a century and a half; and concluding the GAUTAMA of the sixth century before the Christian era to be intended by the name SA'KYA SINHA, which is always enumerated as a synonime, the date of GONERDA III. was adjusted accordingly in the preceding pages, and placed 640 B. C. An opportunity having subsequently occurred of consulting a Burma priest, and a man of some learning, on the subject, there appeared good grounds for revising the passage, and altering the results, in consequence of which several pages previously printed off have been cancelled, and it is only in the marginal dates of the first dynasty that any traces of the error have been suffered to remain. These are of comparative unimportance, and will be readily rectified by adverting to the table. We have now then to offer a translation of the passage; premising, that the term Puranirvrité should be Parinirvrité, the sixth case of Parinirvriti, or in Pall, Parinibbuti, the ordinary term used by the Bauddhas, to express the final Nirvritte or emancipation of their Buddhas or saints in its fullest sense; Pari being added as an intensitive prefix. The use of this and some other peculiar expressions, which are at present quite unintelligible to the ablest scholars among the brahmans of Hindustan, but are familiar to the Rahans of the Burman empire, proves that KALHA'NA, the author of the Cashmirian History, or at least his guides, were well acquainted with the language, and, probably, with the system, of the Bauddhas.

'They (Hushka, &c.) of Turushka descent, were princes, asylums of virtue, and they founded colleges, and planted sacred trees, in Sushka and other places. During the period of their reign the whole of Cashmir was the enjoyment of Bauddhas, eminent for austerity. After them, when 150 years had elapsed from the emancipation of the Lord Sa'kya Sinha in this essence of the world, a Bódhisatwa in the country named Na'ga'rjuna, was Bhumiswara, (Lord of the earth,) and he was the asylum of the six A'rhatwas.'

"As the prevalence of the Bauddhas and consequence of Na'ga'rjuna, if not subverted, were at least checked in the ensuing reign of Abhimanya; and as the passage expressly states that the circumstance occurred after the Turushka princes, the 150 years subsequent to Sa'kya Sinha must fall within the limits of Abhimanya's reign: it is therefore necessary only to fix the date of Sa'kya Sinha to determine that of the several reigns occurring in this portion of our history.

Assuming that this Sákya Sinha was the Buddha of 542 B. C. he ventures to correct thereby Kalhána's more distant epoch:—

"At the same time Kalha'na, well informed as he is in these respects, has evidently confounded the two periods, and hence assigned to Sa'kna Sinha a date corresponding to at least 1332 B. C. although apparently designating the person who flourished B. C. 542. We may therefore venture to correct his chronology with reference to this latter date; although until we can be satisfied that the Sa'kna Sinha of the North-west was one individual with the Gautama of Magadhá, we cannot venture to attach any thing like certainty to this emendation. Some circumstances in favor of the date laid down are adverted to in the concluding observations; and we may here add, that there seems to be a strange connexion between the circumstances and dates of the Zerdashts of Persia and the Buddhas of India, which deserves a more particular investigation than we have hitherto had materials to undertake.

"The passage relating to the prevalence of the Bauddha faith in Cashmir includes the mention of an individual, whose history is fully as obscure, if not as important, as that of Buddha.

"NA'GA'RJUNA as a Bodhisatwa, (see note in page 21,) may be either a religious or a secular character: he was probably the former, as a hierarch, the prototype of the modern Lama of Tibet; his other title, however, Bhumiswara* may mean a prince, and has probably induced Mr. Colebrooke to translate the text generally thus:—

"DA'MODARA was succeeded by three kings of the race of Turushka, and they were followed by a Bodhisatwa, who wrested the empire from them by the aid of SA'KYA SINHA, and introduced the religion of Buddha into Cashmir. He reigned a hundred years, and was followed by Abhimanya."

After carefully considering all the data accessible to him, Professor Wilson decides on adopting the above Buddhistical record of the age in which these three Turushka princes and Nágárjuna flourished, as the most authentic authority available for making the first adjustment in his chronological table; whereby he reduces, at the termination of his "first period," the date of Gonerda III.'s reign from B. C. 1182 to B. C. 388, showing an anachronism in the Raija Tarangini of 794 years.

This circumstance alone, even if no new light could be thrown on this interesting question, would afford a powerful argument in support of the opinions I entertain of the superior accuracy and authenticity of Buddhistical over Brahminical chronology. We should bear in mind, too, that the *Raja Turangini* is admitted to be "the only Sanscrit composition yet discovered to which the title of history can

*" Iswara," (Pali " Issaró,") and " Sárnikó," are often conferred on Buddhistical sacerdotal characters who have gained great ascendancy. Vide chap. v. of the Maháwanso. " Addháyan sámanéró mé gharé hessati Sa μικό." Chap. xiv. " Gahetá pathawi míhi: Dípé, hessanti Issara"." " This samanéro will this very day become the master of my palace." " The land will be usurped by these persons: they will become the lords of this island." (Note by Mr. T.)

with any propriety be applied." It is not a little remarkable, therefore, that Professor Wilson, after having thus recognized the correctness of the date assigned to Sákya Sinha's death, and availed himself of an event connected with Buddhistical history to correct the chronology of the Rája Tarangini, should have entirely lost sight of these circumstances, and been led, in analyzing the Tibetan works, to say that "any thing like chronology is, if possible, more unknown in Buddhistical than Brahminical writings, and it is in vain to expect any satisfactory specification of the date at which Buddha Sákya flourished."

The object, however, which I have more immediately in view at present, is to point out, that the correction adopted by Professor WILSON in this table, which reduces the date of the reign of GONERDA III. from B. C. 1182 to B. C. 388, invites criticism and reconsideration, as being apparently inconsistent with the most approved data previously established, in both the Brahminical and Buddhistical chronologies; and also to endeavour to prove that the imperfection of the adjustment proceeds from the omission of a single letter in the passage of the Sanscrit text quoted in his appendix. Whether the omission of this single letter has arisen from Kalhana Pandit having misunderstood the Buddhistical authority, from which his information was derived; or from the inaccuracy of some transcriber of his work, will not, perhaps, ever be ascertained; unless, indeed, some copy of this history be hereafter found, exempt from this minute inaccuracy, the discovery of which would fix the erratum on the transcriber.

Before I explain the grounds on which I justify the addition of "d" to the numeral "Sárdhán warsha sataň," it will be proper to notice, why the adjustment, made according to the present reading of that numeral, is inconsistent with "the present most approved data of both the Brahminical and Buddhistical chronologies."

According to the Brahminical chronology developed in the *Purunas*, as analyzed by Sir W. Jones, Colonel Wilford, and other oriental scholars, the date assigned to the reign of Chandragupta is B. C. 1502; and whether we regard him as the contemporary of Alexander the Great, or of Seleucus Nicator, the Brahminical date assigned to his reign will have to be reduced to about B. C. 325; making an adjustment of about 1177 years; in comparison with which the foregoing adjustment of 794 years at the reign of Gonerda III. is deficient to the extent of 383 years, and to that extent, therefore, it is at variance with the present cardinal point of Brahminical chronology, the age of Chandragupta. On a careful comparison

of Professor Wilson's Table with Sir W. Jones's Essay, it will, I think, be admitted that Kalhána Pundit did not depart materially from the fictitious scheme of Hindu chronology contained in the Puránas, until after the reign of Gonerda III.; and that it was subsequent to that date, that he attempted to correct progressively the Hindu anachronism. According to the Puránas, Chandragupta succeeded to the Magadha empire about B. C. 1502. Admitting (for reasons hereafter explained), that Asóka of Cashmir is identical with Asóka of Magadha, the grandson of Chandragupta, we shall then have a series of nine (three of Magadha and six of Cashmir) princes to fill up the term of 320 years intervening between Chandragupta B. C. 1502, and Gonerda III. B. C. 1182, giving a somewhat high average, certainly, of 35 years and seven months, but still not greatly out of proportion with the term actually assigned in Buddhistical history to the reigns of the three Magadha kings, (viz.);—

 $99 \div 3 = 33$ years for the average

At all events, it must be conceded that a series of only nine reigns, comprised within so limited a term as 320 years, can by no admissible process of adjustment be extended to 703 by the addition thereto of 383 years short deducted at the age of Gonerda III. Such an addition would make it necessary either to throw back the reign of Chandragupta to (B. C. 1182 + 703=) B. C. 1885, which would disturb the whole scheme of Hindu chronology, or to bring the reign of Gonerda III. (B. C. 1502—703) to B. C. 799, which Kalha'na had not done.

It appears to be requisite, therefore, that the adjustment made in the date of the reign of Gonerda III. should be nearer 1177 than 794 years; and, indeed, I conceive I am justified in asserting, that this position admits of almost arithmetical verification, from the inequalities of the averages produced in the reigns of the three subsequent "dynasties" in the Chronological Table of the Rája Tarangini.

It will be seen in that Table, that Professor Wilson does not escape from his chronological embarrassments till the close of his "third dynasty;" as the averages assigned to two of those dynasties are, by his own acknowledgment, inadmissible. According to his corrected chronology he has

In the first dynasty, .. 21 Princes in 378 years, average 18 years.

In the second dynasty, 6 ditto in 192 ditto, ditto 22 ditto, 8 months.

In the third dynasty, 16 ditto in 433 ditto, ditto 43 ditto, $3\frac{1}{2}$ ditto.

37 1003 general average 27 years, 1 month.

If, instead of resting these adjustments on conjectural grounds, we substitute the precise correction ascertained to be necessary in Hindu chronology at the reign of CHANDRAGUPTA, being about 1177 years, we shall then bring the reign of GONERDA III. from B. C. 1182, down to B. C. 5. The general average of the reigns of the 37 Kashmerian princes from Gonerda III. in B. C. 5 to the end of the reign of Ba'LADITIYA in A. D. 615, will then give the satisfactory result of 16 years and 9 months. The necessity of all further adjustments of the Cashmirian table, subsequent to the age of GONERDA III. will be thereby got rid of. The clumsy expedient of Kalha'na Pandit for making those adjustments, by assigning preposterously protracted terms,-in one instance of 300 years,-to the reigns of the princes of the three subsequent "dynasties," may at once be rejected. His chronology down to the reign of GONERDA III. will be rendered consistent with the Puránas; and our adjustments will be in accordance with the anachronism ascertained to exist in the age of CHANDRA-GUPTA.

As regards the Buddhistical chronology, I have it in my power to adduce direct evidence, independent of hypothetical reasoning, in support of the proposition which I have advanced.

It can hardly be necessary for me to bring forward proofs, beyond those exhibited in the foregoing extracts from Professor Wilson's Essay, to establish, that Aso'ka, "to whom the crown of Cashmir reverted on the demise of Sachinara without issue, was the Magadha prince of that name, the grandson of Chandragupta and son of Bindusa'ra, who became the great patron of Buddhism after his accession to the supreme sovereignty of India. It is found in the Attakatha on the Pitakataya (the commentaries on the Buddhistical Scriptures) as well as in the Maha Wanso*, that this prince administered the government of Ujjéni, by the appointment of his father Bindusa'ro, the emperor of India; that he succeeded to the empire

^{*} Vide Ch. V. As Aso'ka's son, Mahindo, was born while his father "administered the government of Ujjéni," and as Mahindo is stated to have attained his twentieth year in the seventh year of Aso'ka's rule in Magadha, Aso'ka must have governed Ujjéni, for his father Bindusa'ro, at least fourteen years. It is immaterial, as regards the foregoing computation, whether his accession to Cashmir preceded or followed his accession to the Magadha empire, as my calculations are based on the date of the "Third Convocation" in B. C. 307.

in the year 218, after the death of Sa'kya, or B. C. 325; that he became a convert to Buddhism four years after his accession, and that the mission for the conversion of Cashmir was deputed by him, in the 18th year of his reign, after the termination of the third convocation, in A. B. 236 or B. C. 307. The particulars given of the rule of this prince in Cashmír, concise and imperfect as they are, entirely accord, as far as they go, with the foregoing sketch. According to that sketch, Aso'KA is not the direct descendant of his predecessors who reigned in Cashmír; "he was originally a pious worshipper of Siva, but subsequently invented or originated the Jina Sásana" (religion of Jina or Sákya); and, according to the Ayin Acberi, "abolished the Brahminical rites and substituted those of Jina." With these marked features of resemblance, of peculiar and prominent importance in the tableau of Indian History, which are not recognizable in, or applicae ble to, any other Asiatic monarch, it appears to be impossible to withhold the admission that the Aso'KA of Cashmir, and the Aso'KA of Magadha, subsequently called Dhammasoka, the emperor of India, are identically one and the same individual.

If on this hypothetical reasoning, the point of identity may be considered to be established, (and I observe by your Genealogical Tables that it is there admitted,) we have to add 20 years for the residue of the reign of Aso'ka, from the date of the Buddhist mission to Cashmir in A. B. 235, or B. C. 307, to complete his reign of 37 years in Magadha, which brings us to B. C. 287, leaving a term of 282 years between that date and B. C. 5, to which the reign of GONERDA III. was brought, according to the foregoing adjustment (made on Brahminical chronological data) to be divided amongst the six princes who intervened between Aso'KA and GONERDA III. These numbers will give an average of 47 years for each reign, which is certainly inadmissible. This discrepancy, however, only serves to give me greater confidence in the views I entertain; and, indeed, if such a result was not produced, in this particular portion of Buddhistical chronology, the whole of the reasoning entered into in the introduction to my pamphlet, on which I have attempted to prove "that an intentional perversion to the extent of about 60 years has been adopted, to answer some national or religious object, which is not readily discoverable, between the date of Sa'kya Sinha's death and that of the accession of Chandragupta," would be nullified. By deducting these 60 years, about 222 years will be left to be divided among those six princes, which gives an average of 37 years, which also is far from being a satisfactory result. But a single protracted reign, in so limited a number as six monarchs, would be sufficient

to reduce the average of the other five reigns to an admissible term, and would, at the same time, adjust the date of Aso'ka's reign in the Raja Tarangini to the date assigned to it in Buddhistical chronology, as well as produce the same result with that arrived at by the foregoing adjustment of the Brahminical chronology,—viz. fix the age of GONERDA III. to about B. C. 5.

In the translation of the foregoing Sanscrit quotation, on the authority of which Professor Wilson's adjustment of the age of GONERDA III. from B. C. 1182 to B. C. 338 is founded. I have ventured to make a few verbal alterations, unconnected with the date, in conformity with the meaning which Buddhistical phraseology would suggest. From the context with the other portions of the work, it may be perfectly just to apply the term "pravrajyarjita" to "Bauddhas" exclusively; and M. Csoma DE Körös corroborates, from Tibetan authorities, the inference that these Tartar princes were of the Buddhistical faith. But that term in Buddhistical literature signifies, in the most general sense, "ascetic," without distinction of any particular religion. The impression conveyed to my mind by this passage is rather to the effect that "Cushmir was under the spiritual controul of (Brahminical) ascetic sages, eminent for their rigid piety," than that "Cashmir was the enjoyment of Bauddhas eminent for austerity" during the reigns of the three Turushka princes.

The correction made by Professor Wilson from "Puranirvritte" to "Parinirvrite" is indispensable; and had the Burma priest, whom he consulted, called to his recollection that Majjhantiko thero did not repair to Cashmír for the purpose of converting it to Buddhism, until 236 years after the death of Sa'kka Sinha, he would doubtless have also pointed out that, according to Buddhistical authorities, there was as great an irrelevancy and inadmissibility involved in the specified date of 150 years, as in computing that date "anterior" instead of "posterior" to the death of Buddha.

This manifest inaccuracy is to be rectified by prefixing "d" to the "sárdhan varsha satan," and converting it into "dasárdhan varsha satan*." In making the addition of this single letter, it must not be

^{*} I should here note that I have never met in my Páli reading, nor has any native scholar been able to refer me to, the numeral "Saddhan-sata" for "one hundred and fifty;" although, according to grammatical rules, the contraction of "Saha-addhán-sata" into "Saddhan-sata" appears to be perfectly admissible. Whereas the numeral "Dasaddhasata" contracted from "Dasa-addhán-sata" for "half a thousand," is in continual use. It is repeatedly met with in the Maháwanso, Ch. I. "Sámuddé Nágabhawané dasaddhasata yójané." "In

regarded as an arbitrary alteration on my part. It is a correction. the adoption of which cannot be resisted without impugning the authority of authentic Buddhistic history, in which "Na'ga'rjuna" (as Professor Wilson himself surmises) under the name of "Na'GA SE'NA" enjoys a distinguished celebrity. He does not appear ever to have visited Ceylon, and as the Attakathá extant here only comprise a continuous record of Indian events up to the period when the third convocation was held in A. B. 236 or B. C. 307, while he himself flourished in A. B. 500 or B. C. 43, the only record of NA'GA' SE'NA in this island, (as far as I am aware,) excepting some unconnected allusions to him in Buddhaghoso's Attakatha, is the Milindapanno (commonly called Milinapprashno), a work which derives its title from his dialectic controversy with MILINDU the raja of Ságalá. In that work, from which I shall presently make some extracts, it is specifically stated that he appeared (in fulfilment, of course, of an assumed prediction of SA'KYA SINHA) five hundred years after the death of Buddha; and that work, moreover, contains the names of the six Arhatwas, (Páli Arahantá,) who, most fortunately for the illustration and substantiation of my case, are referred to in the four apparently insignificant words with which this Sanscrit quotation concludes. In Professor Wilson's translation of these four words. the negative "na" has been overlooked, and he has rendered them into "he was the asylum of the six Arhatwas," instead of translating them "he did not recognize," i. e. he denounced, "the six Arhatwas."

With these explanatory remarks, I venture to offer the following translation of this valuable Sanscrit quotation.

"They (Hushka, Jusrka, Canishka) of Turushca descent, were princes asylums of virtue, who founded colleges and chetiyas in Suscha and other countries. During the entire period of their rule, the whole of Cashmir was under the spiritual controul of ascetic sages, eminent for their rigid piety. Thereafter, when (half a thousand) five hundred years had elapsed in this (land), as well as the whole world, from the period that the sanctified Sa'kya Sinha attained Parintriviti, the pre-eminently endowed Bódhisatwa, Na'ga'rijuna, became the (spiritual) lord of this and many other lands, and did not recognize (i. e. denounced) the six Arhatwas (who were his contemporaries)."

a Nága kingdom, half a thousand (five hundred) yójanas in extent, bounded by the ocean." Ch. V. "Purisánán dasaddhéhi satéhi pariwarito:" "attended by retinue of five hundred men." I am not aware whether this remark be applicable to the Sanscrit language also; nor does it appear to me to be material, as Kalha'na probably quotes from a Pali Buddhistical work.

The general history of Na'GA SE'NA, to which the Milindapanno refers. although it could throw no light on the history of Buddhism in Ceylon, in as much as Buddhism was established in this island 264 years before the period of his ministry, and as he himself never appears to have visited it, is nevertheless a work, the value of which, as regards the Buddhistical history of India, cannot well be overruled, and for the recovery of which, if still extant in the regions mentioned by Colonel Top and Lieutenant Webb*, no pains should be spared. It is reasonable to infer, from the tenor of the Milindapanno, that his triumph over Milindu raja was either his principal achievement, or that which most contributed to his renown; but the mention made of him in the Rája Tarangini presents conclusive evidence of the sphere of his influence and ministry not having been confined to that triumph; and the circumstance of the Milindapanno commencing with a quotation from a more general work, affords equally conclusive proof that such a history of his life had once been extant. The Milindapanno being incomplete, neither the date at which, nor the individual by whom, it was compiled from pre-existing works, is specified in it. The following is a literal translation of its commencement.

"Adoration to him, who is the sanctified, the deified, the omniscient, supreme Buddha!

"In the capital city, Ságalá, MILINDU approached Na'GA SE'NA, as a river approaches the ocean. That monarch having selected him who was endowed with the power of enlightening the darkness of ignorance, as if he were a meteor-bearer, proposed certain profound questions (to him) involving the great principles of right and wrong."

"There (in reference to that quotation) do ye (my hearers) devoting your undivided attention to, and preparing your minds to be favorably impressed with the subject, listen to these profound and doubt-dispelling dissertations, which, as well from the questions suggested as from the solutions rendered, their deep import, and connected consistency, their influence over the passions and charm to the ear, (are) unprecedented, and make the hair stand on end (with amazement); portraying them, from the similitudes and parables used by Na'ga Se'na, as if immersed in the (waters of) the 'Abhidhamma' and 'Wineyo,' secured (at the same time) in the meshes of the net of the 'Suttans.'

"The subject may be thus set forth in due order."

After describing the magnificence of Ságalá, and giving an account of both NA'GA SE'NA and MILINDU in a previous existence, the former as a Samanero, and the latter as an Upasampada, the narrative thus proceeds.

* Alluding to the existence of an extensive Bauddha library in Jesalmir. The raja of this country is, we hear, passionately addicted to turning, and might barter all his books for a good lathe!—Ep.

"Thereafter, in whatever manner the appearance of the 3rd* Maggalliputtatisso was foreseen by our Bhagawá, in the same manner (the appearance of) these two personages also was foreseen by him, for he had thus predicted: 'Five hundred years after my Parinibbánan they will be born. Whatever discourse there may be propounded by me, which, from its conciseness may appear entangled and confused, these persons will, from the mode in which they will conduct their interrogation and illustration. thoroughly unravel it. Of these persons, the Samanéro will be born in the character of Milindu rája in Ságalinagara in Jambudipa, accomplished in learning, skilful in conduct, gifted with judgment, powerful abroad; who, both in the conception and execution of his designs, whether regarding the past, the future or the present, will exert a sound and deliberate judgment. To him many endowments will be attainable, viz: the 'Súte,' 'Sammati,' 'Sankhya,' 'Yóga,' 'Níti,' Widésika,' 'Gana ká,' 'Gandamba,' 'Tikechchha,' 'Chatubéda,' 'Purána,' 'Itihása,' 'Joti,' 'Máyá,' 'Hétu,' 'Mantaná,' 'Uddhá,' 'Chhanda,' 'Samuddha.' He will be capable of confuting sages versed in the nineteen védas, invincible from his own gifts, and held in universal estimation, even of those of antagonist creeds. In the whole of Jambudipa, there will be no one comparable to Milindu raja, in the aforesaid particulars of power, energy, enterprise, and wisdom. He will be endowed with riches and worldly prosperity; and guarded by military power in a state of the utmost efficiency.'

"On a certain occasion, Milindu rája, desirous of inspecting his military array, composed of every branch of the four constituent hosts of an army, proceeding out of the capital, and having caused them to be counted; this monarch, a profound disputant, and versed in the phraseology and science of those learned in the 'Sakáyata,' looking at (the position of) the sun, thus addressed his attendant officers of state: 'There is a long day before us yet: how shall we pass it? Were I to return instantly to the town, is there any sage, whether sacerdotal or bráhman, the head of a great sect, having a fraternity of his own, and being a preceptor himself, who maintains that he is arahat and an omniscient Buddha, who would be willing to enter into a disputation with me, for the purpose of solving doubts.'

"On having thus expressed himself, his five hundred Yonaká (chiefs) replied to Milindu rája in these words: Mahárája! there are six (such) viz: †Puránarkassapo, Mokkhaligósálo, Nigunto-náthaputto, Sanjágo bélatti putto, Ajitakésakambali, and Pákudokachcháyano, who are heads of great sects, having fraternities of their own, and are preceptors themselves, of great celebrity, having numerous congregations, sectarians in

^{*} Vide Chapter V. Mahawanso for this prediction.

[†] These are also the designations of certain contemporary disciples of Gou-

principle, the elect of a great portion of the human race. Mahárája! seek them; enter into a controversy (with them) and solve doubts."

The narrative proceeds to describe the disputation of MILINDU. first, with Purána-kassapo, and then, with Makkhaligósálo, and represents that as the monarch confuted them and similarly overcame every other disputant, all the arahat priests absented themselves for twelve years from Ságalá, and retired to the vicinity of the Rakkhitatalo mountain in the Himawanta regions. At the intercession of Assa-GATTA thero, in behalf of the Buddhistical priesthood generally, SAKKHA, the supreme of déwas, is represented to have invoked Na'GA SE'NA, who was in the Kétumati heavens, and called Mahá SE'NA, to be born in the human world, for the purpose of confuting MILINDU; to which NA'GA SE'NA ultimately consented. Accordingly "he is conceived in the womb of the wife of the brahman named So'NUTSARA, an inhabitant of the village Kajangalla on the borders of the Himawanta mountains," and becomes highly accomplished and perfect master of the three védas. Doubts are then engendered in his mind as to the correctness of the doctrines contained in those védas. While in this frame of mind, Rohana théro, as predestined, enters into a controversy with him, converts him, and removes him to Rakkhitatala. There he is admitted into the "Samanéra" order of the Buddhistical priesthood, and acquires the Abhidhammapitaka; and is ordained an "Upasampada" priest at the age of 20 years. He is next placed under the tuition of Assagutta thero, apparently in the same village, for three months, where he first attains the sanctification of "Sótápatti." At the termination of this period, he is sent to place himself under the charge of DHAMMARAKKHITA thero of the Asókárámo temple* in Pataliputra, which is stated to be distant "one hundred yójanas" from Kajangalla, the birth-place of Nága Se'na. On the road he meets with a Setthi, who was travelling also to Pataliputto, with a train of five hundred carts. This Setthi maintains him on the road, and hears his discourses propounded from the Abidhamma. At Asókáráma vihára, in the course of three months, he acquires the Pitakattaya by heart, and in three more, masters their import, and attains " Arahat." He is then summoned to appear before the Arahat priests, who had retired to Rakkhitatala mountain in Himawanta; and he repairs thither. He is there enjoined by these Arahat priests to proceed to Ságalá and cope with MILINDU rája, whose triumph over all other théros had driven them to the Hima-

^{*} Vide Ch. V. of the Mahawanso, for the construction of this temple, by DHAMMA'SO'KA.

wanta. He consents to undertake the enterprize, confident of overcoming him, and all other opponents; and advises the rest of the Arahanta to precede him thither, without fear. They do so, and Ságalá is represented to "glitter with vellow robes again." MILINDU then enters into a disputation with Ayupata thero of Sankheya parivéna, on the question as to whether the priesthood possess any spiritual advantage over lay ascetics, resulting from their ordination. It does not clearly appear whether Avupála is one of the priests who came from Himawanta or not, but he is also confuted by the raja. The royal suite, composed of the aforesaid five hundred Yonaka nobles, do not participate, however, in the monarch's exultation, and attribute the discomfiture of the théro to his individual incapacity. At this particular juncture, Nága SE'NA makes his appearance in Simulá, and establishes himself at the Sankéyapariwéno with a sacerdoral retinue, which is exaggerated into 80,000. The Milindapanno then proceeds to describe the preparation for, and the actual interview between MILINDU and NAGA SE'NA, quoting occasionally from the work before r ferred to. MILINDU, on this occasion, loses his former confidence in himself, both from the fame of NAGA SE'NA's reputation, which had already reached him, and the composure with which he received him. It is finally agreed upon, that the disputation shall be carried on in the king's palace, in the presence of ten selected théros. The disputations are then entered into accordingly. The Milindapanno extant in Ceylon contains 262 dissertations, as well as the designations of the dissertations that are missing, being 42. In the Singhalese version of the Milindapanno, from information stated to be derived from a Tiki brought from Siam, which I have not met with, it is mentioned that these dialectics terminated in MILINDU becoming a convert to Buddhism, then a priest, and ultimately an Arahat.

These extracts and abstracts, whether viewed in connection with the events recorded in the Cashmirian history, which also bear testimony to the partial subsidence of the influence of Buddhism in Northern India, and of the congregation of the heads of that faith in the neighbourhood of the Himálayan mountains about the third century B. C., and the subsequent revival of that influence in the days of NÁGÁRJUNA and the Turushka princes, who are likewise represented to have resorted to Cashmir from the same quarter; or whether we regard them in connection with the incidents contained in the history of Buddhaghóso in the fifth century of our era, as illustrated in my pamphlet, together with the data contained in Tibetan annals as noticed by Mr. Csoma, are replete with historical importance and engrossing interest. I shall not, however, venture to speculate

on data, which are as yet but imperfectly analyzed, and on the authenticity of which oriental scholars have still to form a judgment.

Reverting, therefore, to the consideration of the Cashmirian Chronological Table, I have to observe, that according to the Milindapanna, Nága Se'na flourished about 500 years after the death of Sákya Sinha, or B. C. 43. If his visit or mission to Cashmír took place towards the close of the reign of the three Turushka princes, the rule of their immediate successor, Abhimanya, who restored Bráhminism in Cashmír, must also have commenced about the same date. By your Genealogical Tables, that monarch reigned 35 years, which term deducted from B. C. 43 leaves B. C. 8; being nearly the same date as those to which I arrived, by the two foregoing computations, in which I have attempted to reconcile—my adjustment "to the most approved data as yet established in both the Bráhminical and Buddhistical chronologies."

The next and last source of evidence of which I have to avail myself, is derived chiefly from your valuable researches in numismatalogy. At the end of the second volume of Lieutenant Burnes' travels into Bokhára, some observations are furnished by Professor Wilson and yourself, on one of the Bactrian coins found by that enterprizing traveller, and portrayed in the engravings attached to his work*.

The points you seek to establish in regard to this coin are, that it belongs to Kanishka, one of the three Turushka princes above named; and that he reigned "near the end of the second century B. C." and these points are apparently corroborated by the foregoing date assigned for the age in which Nága Se'na lived, viz. about B. C. 43. By your Genealogical Tables these princes are represented to have reigned, synchronously about 60 years: that computation, also, will bring the commencement of their rule to B. C. 43 + 60 = 103 B. C. or "near the end of the second century B. C."

^{*} See the second volume of the Journal, page 314. Most of our readers are aware that the date assigned in our notice of Lieut. Burnes' coin, was afterwards in a measure abandoned, on the ground of its being found in association with Sassanian coins of a much later period.—The reading of the letter P in KANHPKOS was also confirmed by a multitude of specimens. No argument, therefore, can safely be built on the evidence of this coin as to the period of Na'ga'rjuna's mission, but there remains ample authority without it in the written history of the Buddhist church.—The typographical error in Mr. Wilson's Chronology of Cashmir I could not fail to perceive when drawing up my own tables; but for the reason above given, I did not think it worth while to notice it.—Ed.

I cannot, in this place, forbear noticing that, misled by a slight derangement of type in the impression of the Professor's Chronological Table, you have also in this note been betrayed into making an undeservedly disparaging remark in respect to Buddhistical as compared with Bráhminical chronology. Under the impression that the date assigned in the Rája Tarangini to the termination of Abhiman-va's reign was B. C. 118, you consider the accuracy of that chronology to be erroneously impugned by being thrown back to B. C. 388, by Professor Wilson, in deference to Buddhistical authority. The date assigned for that reign, however, is not B. C. 118, but B. C. 1182, in the Rája Tarangini; and by that adjustment, made on Buddhistical authority, though the correction, from the circumstances explained, is insufficient, still an important and valuable correction is effected to the extent of 794 years!

I have thus, from four sources of information, totally unconnected, arrived at one and the same conclusion, corroborative of the authority of the Milindapanno, on which I have added the single letter "d" to the numeral "Sárdhan-satan." The chronology of the Rája Tarangini is brought, by the first, to coincide with the adjusted Hindu chronology in the Puránas—by the second with the Attakathá of the Pittakataya and the Maháwanso—by the third with the age of Nágárjuna, or Nága Se'na, as given in the Milindapanno, and the revised Sanscrit quotation from the Rája Tarangini: and by the fourth, with the age of the coin of Kanishka; with Tibetan authorities adduced by Mr. Csoma; and with the epoch of the overthrow of the Bactrian dynasty, as given by Schlegel and other authorities.

In computations of this nature, exact precision is not to be attained, or expected. In specifying the age of Nagarjuna, in such round numbers as 500 years after the death of Sákya, it is manifestly an approximating rather than a specific date. If from the general tenor of the Rája Taranginí, and the Tibetan authorities referred to by M. CSOMA, it be clearly shown that the Turushka princes were Buddhists, and that Nágárjuna appeared in Cashmír during their dynasty, the only alteration rendered necessary in the foregoing computations, would be that his visit to Cashmir should be considered to have taken place about 460 instead of 500 years after the death of SAKYA. Mr. CSOMA'S unpublished life of SA'KYA, to which you refer as containing data connected with Buddhistical history, derived from both Sanscrit and Tibetan works of the age of Kanishka, furnishes another important and encouraging evidence of authentic annals of Buddhistical history having extended in Continental Asia beyond the age of Aso'KA.

II.—Third Memoir on the ancient Coins discovered at the site called Beghrám in the Kohistán of Kábul. By Mr. Charles Masson. Dated Kábul, May, 1836.

Two notices on the site of Beghram, and of the nature of the coins found at it, have already been made public in the pages of the Journal of the Asiatic Society of Bengal. The collection of its antique treasures having been continued for three successive seasons, the results may be worthy of being presented in one view, both for exhibiting the exact state of discovery up to this time, and for providing data on which to found inferences or to hazard conjectures on the curious and intricate subject of Bactrian history and antiquities.

It is not the object of this memoir to convey a full account of the present state of knowledge on these and other points, upon which, in truth, light is only beginning to dawn; but simply to narrate the fruits of our own labors, happy if they prove useful to those, who, with superior advantages, and when sufficient materials are collected, will, no doubt, favor the world with some important work. We have, therefore, only to descant upon the coins found at Beghrám, and such, allied or connected with them, which may have been procured by ourselves in Afghánistán, and refrain in the same spirit from the delineation of any coins not actually found by us; and if such are alluded to, it is from necessity, and to direct attention to them.

The site of Beghrám, whatever its original name may have been, and whoever may have been its founder, yields evidence from the coins found at it, of its existence as a city, which must, at least, have flourished from the epoch of EUTHYDEMUS, the king of Bactria, to that of the Mahommedan Caliphs-or for a period of 900 years. We have speculated on the probability of its pointing out the situation of Alexandria ad Caucasum, or ad calcem Caucasi, and see no reason to change the opinion, viz. that the honor of being considered such, must be assigned to it, or to Niláb of Ghorbund. The detection of a coin of one of the Antiochi, may prove that it flourished prior to the age of EUTHYDEMUS, as it undoubtedly will have done, -and certain Hindu Brahminical coins* described as Class Brahminical, may perhaps verify that it existed subsequently to the Mahommedan Caliphs, or to the duration of their sway in Afghánistán:-at all events, it would appear to have been destroyed, in whatever manner, before the era, when coins with Persian legends became current in these regions; as our aggregate eollection of nearly 7,000 coins from its site, has not been contami-

^{*} Of the Rajput, or bull and horseman groupe.- ED.

nated with a single Persian coin—unless fig. 9. of the just noted Hindu series have a Persian legend, which may seem to intimate that the city's extinction was about the period of the introduction of the language, which may have been contemporaneous with the rise of the Mahommedan sovereignty of *Ghazni*. The coins of its princes have Persian legends, to prove which, we have inserted a silver coin of the celebrated Sultan Mahmun: none of his coins or of his father, Sabektegin Kha'n, have been found at *Beghrám*, where those of the Caliphs so numerously occur.

Although Beghram, inferring from the presence of topes or sepulchral monuments on its site and in its vicinity, may be supposed at some period to have been a capital, which its name testifies, it will generally have been only a provincial capital—and this is worthy of note, because there may be reason to suspect that many of the former rulers in these countries, particularly the Greek-Bactrian princes, had distinct provincial coinages.—Certain coins of Apollopotus, Antilakides, Ermaios and Eucratines seem to countenance the suspicion.

It is presumed that coins constantly found and in number on any known spot, afford proofs of their having once been current there, and that the princes whom they commemorate, whether as paramount or tributary sovereigns, held also authority at that spot. The numbers in which coins may be found, may perhaps furnish a criterion upon which we may calculate, first generally, the duration of the dynasties denoted by the various types of coins, and next particularly that of the reign of each individual prince. A collection of one year would not furnish this criterion, a collection of many years might,—a statement is therefore annexed, of the numbers in which the several descriptions of coins found at Beghram have, during three years, been obtained; -and if it be seen, that they are found annually in due numerical proportion, it may be of service in our speculations, assisted by the coins themselves. Indeed of the recorded kings of Bactria, the coins are found in just the numbers we might expect, and confirm what we know as to the length of their reigns; and in some other instances of unrecorded princes, their coins and the frequency or rarity of their occurrence corroborate the conjectures as to the extent of their reigns, which other accidental discoveries seem to authorize.

The coins of Beghrám fortunately admit of ready classification, and may be reduced to five grand classes: 1st, Greek-Bactrian; 2nd, Indo-Scythic or Mithraic; 3rd, Ancient Persian, whether Parthian or Sassanian; 4th, Hindu or Brahminical; 5th, Kufic or Mahommedan—the last class may chronologically be entitled to stand before its predecessor the Brahminical one.

These classes at once point out the general nature of the succession of sovereignty in this country, from the age of EUTHYDEMUS to the Mahommedan era. To define particular alternations and revolutions in authority, which will inevitably have happened, more knowledge is requisite than we possess, or are likely to acquire. Yet some of these may be conjectured from the faint lights discovered coins impart, and many more may become obvious, as research advances, and as we progress in acquaintance with the subject.

From the historical records of the west we learn so much as, that an independent monarchy under Greek princes was established at Bactra, or the modern Balkh, about 250 years before Christ; and from them we are led to infer that it ceased to exist about 130 years before Christ, having thus flourished about 120 years. From the same records we also learn the names of seven of its princes, Theodotus I. the founder, his son and successor Theodotus II. the usurper Euthydemus of Megnesia, his son Demetrius, Apollodotus, and Menander, famed for exploits in India, and mentioned conjointly with Eucratides, surnamed the Great.

The actual coins, incontestible evidences, recently discovered of a multitude of Greek princes, respecting whom history is silent, not only seem to intimate that the Bactrian empire may have had longer duration than supposed, but farther to establish the fact, that a variety of independent Greek principalities were erected about that time in Central Asia, some of which, judging from the coins of the princes, rivalled the Bactrian in power and splendor. These principalities, or some of them, we infer to have endured up to the first century of the Christian era,-probably to the middle or close of the second century, about which period Greek authority would appear to have been displaced by the race of princes hitherto designated Indo-Scythic, of whom Kadphises and KANERKOS are pre-eminent and have the precedence. Their successors appear to have ruled for a very long period, according to circumstances, independent or tributary to paramount governments in Persia or India,-perhaps very close to the Mahommedan era. We say very close, because before the last mentioned era, a Sassanian dynasty or dynasties must be introduced, and possibly may have ruled at that epoch. This speculation may be confirmed or otherwise, by consultation of the Arabian historians, some of whose works will doubtless inform us from whom the armies of the Caliphs wrested these countries. Beghrám has not yielded one coin of the Arsacides, or one coin that we dare positively to affirm to be Parthian. with the Sassanian symbols on the reverse, or the distinguishing fire altar, are very numerous; but it may be questioned whether they are coins of the Sassanides of *Persia*, and whether they may not rather refer to distinct princes, that we believe Persian authentic history attests to have flourished in these countries, as at *Zabulistán*, &c.

The characters of the inscriptions on the Beghrám coins, some of which command attention from their peculiarity, may be also useful in determining the periods at which particular dialects ceased and became used in Afghánistán. The earlier Greek-Bactrian sovereigns, as EUTHYDEMUS, being guided by coins hitherto found, placed on their monies only Greek inscriptions; some of their successors, as Eucra-TIPES, have coins bearing in the same manner only Greek legends, and others exhibiting both Greek and native legends; while others, and the majority of them, as Apollopotus, Menander, &c. have on their coins invariably both Greek and native legends; no one coin of these sovereigns having been met with bearing simply a Greek inscription. The opinion might be advanced, that native legends were first adopted by those princes who extended their empire by the acquisition of distant provinces, and their absence on the coins of EUTHYDEMUS will not controvert it, as it is nearly certain that he could have carried his arms across the Causasus or Hindu Koosh, only towards the close of his reign. Another question will then arise, whether the characters of these native legends refer to a language common in Bactria or the countries north of Caucasus, or prevailing only in the Indian provinces south of it :- the latter may be suggested, by those who suppose Menander to have ruled in India before he conquered Bactria; for if he did, so did Apollopotus; and on the coins of these princes, these characters will then be first noted. It is not, however, positive that MENANDER preceded EUCRATIDES; for although generally believed, the scant historical data left us are as much against the belief as for it. The language itself, that of this part of Asia, two centuries before Christ, will not have become obsolete until the period or nearly so of the Mahommedan era; for although the coins of KAD-PHISES, whose epoch we would fain believe was about 200 A. D. are the latest apparently which exhibit them, -excavations near Jelálábád, in the burial grounds of the ancient Nagara, have elicited inscriptions in the same character, which may safely be assumed to have been deposited at some period within the century preceding the Mahommedan era. Indeed, if the famous Manikyala tope be an erection subsequent to this era, as we suspect to be proved by some of the coins extracted from it, the language may have continued in use to a much more recent period; and all these circumstances may be adduced to support the opinion, that it is of Indian rather than of Bactrian origin. Mr. PRINSEP has admirably commenced the investigation of

this novel language, and to assist in the attainment of an object, from which so much advantage is likely to be obtained, we have, following that gentleman's plan, given the names, titles and epithets of the Bactrian kings, &c. as we find them on coins before us. This might have been more satifactorily done, had we, for the purpose, taken full advantage of all the coins which have passed through our hands: but as they have been transferred only to receive superior attention, the matter occasions no regret, and is noticed to excuse individual neglect in this instance and in another, viz., the passing slightly the characters on our Sassanian coins, which, while they exhibit some varieties, appear singular and different from the ordinary forms of Pehlevi.

The coins of Agathocles and Pantaleon have native legends in another peculiar character, essentially distinct from that found on the coins of the other Bactrian princes, and both of them on every account must stand high in the royal lists of these countries. The character, Mr. Prince suggests, is that of the inscriptions found on the columns of Delhi and of other places in India,—a character also that of the coins of the early Canouje princes, and singular it is that a connection may be traced between these coins and those of Agathocles and Pantaleon.

About the period, or a little anterior thereto, of the Mahommedan invasion, we find the first traces of Nágari, but on coins which we are not positive were current at Beghrám. The Caliphs introduced Kufic, shewn by their coins, and on the inscriptions of the columns at Ghazni, the seat of their government. To them succeeded in authority the Brahminical sovereigns, as we suppose, whose coins have again Nágari legends, and these were expelled by the Mahommedan princes of Ghazni, when modern Persian became the general and written language of the country, as it remains to this day.

It may be proper to note, how tenaciously the Greek language was preserved on the coins of this country, up to a period within a century or two of the Mahommedan era, and employed by the whole series of Indo-Scythic kings excepting Kadphises, to the exclusion of the native dialect. While there is sufficient testimony that the Greek language was studied and well known by the fashionable and higher orders in India during the first and second histories of the Christian era, the latter coins of the Indo-Scythic princes seem to testify, by the very corrupted characters they bear, that at the period of their coinage the knowledge of it was very trifling, or limited to the power of determining the value of its letters,—Greek artists would then have been out of the question; and without some such knowledge it is diffi-

cult to conceive how Indian artists could have arranged in Greek characters such words as AEPO, MIOPO, \$\phiAPO, OKPO, &c. The respect so obviously shewn to the Greek language may suggest the opinion, that coinage was considered eminently a Grecian art, and corroborates the notion that the Macedonians introduced it into these parts of Asia.

The several devices of the Bactrian coins, whether Greek or Indo-Scythic, are interesting from their variety, and instructive from the information they convey as to many points, particularly the religion of the times. Of the Greek, some display the deities of the classical Grecian mythology, as Jupiter, Minerva, Apollo, Hercules, &c. represented in the attitudes, costumes, and with the attributes commonly assigned to them in the West ;--some have animals, as elephants, horses, bulls, camels, &c., from which may be implied localities of rule; others have warlike devices, as horsemen at charge, seeming to indicate the personal character of the prince, and others appear to commemorate some remarkable incident in his career, as victory presenting a chaplet, or a figure trampling upon a vanquished foe. The Indo-Scythic coins have universally devices, whose accompanying inscriptions, as fully and satisfactorily shewn by Mr. PRINSEP, prove to be personifications of the sun and moon. It may excite surprise that the peculiar religion to which such personifications refer, should have been so exemplified on the coins of princes, whom we have considered of the Buddhist faith. It was, nevertheless, the religion of old standing in these countries, the supremacy over which, if acquired by Buddhist or Indo-Scythic princes, will have been acquired, as supremacy ever is, by conquest. Of this ancient religion, besides the evidences furnished by coins, we have that afforded by the temples and places of sepulture. That the Buddhist faith also prevailed, while agreeable to historical record, is not contrary to hypothesis; and the conquerors of that persuasion may, from policy, have placed on their coins the emblems of the national religion of the vanquished. As Buddhism will also have gained ground by a correspondent decline of strength in the religion which preceded it, it is natural that superstitions and observances of both should be blended.

The regions spreading from the source of the Oxus have claims to be considered the birth-place of that peculiar form of the Mithriac religion, which was at one time adopted in all the countries between the Indus and the Bosphorus—and of which vestiges are still seen in the temples and sepultures of its votaries. Persia presents the superb proofs of it in the wonderful ruins of Persepolis, and Afghánistán displays them at Bamián. Numerous are the places of minor considera-

tion in Afghánistán, Turkistán, and Badakshán, which were alike sacred. but in a less degree, which yet plainly indicate the strongholds of the faith they commemorate. The distinguishing feature of these sacred places is the samach, or cave, always found with them, and which decides the identity in character of the honey-combed hills of Bamian in Afghánistán, and those of Tilmissus in Asia Minor. It is affirmed in the Ayin Akberi, that there are 12,000 of these samaches in the hills of Afghánistán:—the number is not overrated. There is no reason to suppose that they were ever the residences of a multifarious community, engaged in the ordinary occupations of life; -it is obvious, that they were the abodes of priests and ascetics connected with the temples of religion and sepulchral monuments. So plain is this fact in Afghánistán, that, if a solitary samach or cave be discovered, it is merely necessary to employ the privilege of sight to detect the mound or tumulus relating to it; and vice versâ, if a tumulus be first descried, the sight directed to the nearest eminence will not fail to discover the cave or caves belonging to it. It is always the case. that these monuments and caves are found at the skirts of hills, shewing that they were remote from the inhabited villages, then as now. and in conformity to the spirit of asceticism, enjoined by the religion of the day. It need not, therefore, be deemed that the caves of Afghánistán were the dwellings of a rude Trogloditic nation :-- on the contrary, they are works of art, the results of vast labour and expenditure, and must have been formed under favorable circumstances of national prosperity. Let no one imagine he beholds in them the retreats of the Mardi. The most prominent of the sepulchral monuments of Afghánistún are unquestionably its topes or royal cenotaphs with their tumuli: the latter so perfectly agree in form with the Buddhist dehgopa that it would be difficult not to allow them to be the same thing. The most ancient of the cenotaphs hitherto examined in Afghánistún does not appear to attain the antiquity of the Christian era,-most of them certainly fall much short of it: it is true that every tope has its caves, but there are caves, as in the conspicuous instance of Bamian, which have not topes: Bamian*, like every other spot

^{*} There is an error in our account of the site of Alexandria ad calcem Caucasi, contained in our memoir of 1834 relative to the river of Bamián, which it is necessary should be noted. We have made that river pass by Ghorband, which we supposed it did, contrary to the reports of the natives—they are correct, and the river flowing northerly falls into the stream of Kundúz. Ptolemy, we believe, has an upper and a lower Nilábí, when noting the country about Alexandria; and they can scarcely be other rivers than those of Ghorband, and Puryshir.—May, 1836.

in Afghánistán, has its mounds or ancient burial places. The cave temples may therefore be considered, in some instances, more ancient than the topes, whose age is within the reach of verification; and while it may point to the period of the introduction of Buddhist sovereignty in Afghánistán, that of the cave temples must be carried to the period when the religion, in whose service they were constructed, had its rise or was pre-eminent. Of this religion the Guebres are, at this day, evidences, as are possibly the inhabitants of Cafferistán. Asceticism, of which every case presents a memento; while a distinguishing feature of primitive Buddhism would be also a condition of the more ancient Mithriac faith; for

" La religion a toujours produit des solitaires."

Reverting from this digression to the coins to which the term Indo-Scythic was once considered so aptly applied, and whose sovereigns we had considered, in deference to historical evidence, to have been of the Buddhist religion, if it should be ultimately found that they were of another faith, yet the Buddhist religion will have been widely disseminated in Afghanistan, the images of Buddha and other idols to be found in abundance being accepted as proof. The apparent traces of the faiths of Mithra and Buddha observable in the antiquities of the country, are only natural consequences; -in like manner, at Moscow before its destruction, might be seen the mosques of Mahommedans surmounted by the cross, as at the present day at Constantinople may be witnessed the temples of Christianity surmounted by the Crescent. The terms applied to designate the sun and moon on these Indo-Scythic or Mithraic coins, may suggest some reflections, some of them appearing to have been derived from the West, as HAIOC, NANAIA, PAPO, &c. and others from the east, as MAO, OKPO, &c.

We had hoped to have obtained a sufficient quantity of coins from some known spot north of the Caucasus, which could not fail of throwing additional light on Bactrian numismatology; but not having been able personally to attend to the point, dependence upon others has hitherto frustrated our object. Even at Beghrám we have not met with all the coins that probability would lead us to expect; at least we dare not appropriate any of them to the Pandava dynasty, which governed in the Paropamisus at the period of the invasion of Antiochus the Great. It is but reasonable to suppose that after the Macedonian invasion, all the native princes had distinct coinages, and, of course, this dynasty among the rest. Greek historians have preserved the name of Sophagasenus, who established himself in the Paropamisus; and Sanscrit records, as Colonel Top informs us, gives the name of his son Gaj, both valuable; Gaj accounting for the etymology of Gaj-

ni, or as now called Ghazni; and SOPHAGASENUS, shewing the name both of the prince and of his nation. The former, Colonel Top tells us, was Subhav or Subhaq; and as for the latter, we learn from PLINY that the ASENI peopled three cities, their capital being Bucephalia; the ruins of this city may still be seen on the Jèlum river, in the Panjáb, and the Yadu or Yidu hills, from which Subhav issued on his career of conquest, still preserve their ancient name in Jid or Yid. branch of the Pandava family being cotemporaneous with EUTHYDE-MUS of Bactria, who is supposed to have deprived it of sovereignty in the person of Raja GAJ; it is evident, that the sway of the two first Bactrian kings, Theodorus I. and Theodorus II. did not extend south of the Caucasus; -it also is manifest that EUTHYDEMUS could have established his sway over the Paropamisus only towards the close of his reign; for at the time of the expedition of Antiochus, Sophagasenus, as the Greeks have it, the father of GAJ, was living. PLINY in mentioning the Aseni, is speaking of the nations which inhabited the modern Panjáb, but it is probable that he gives the information he derived from authors who flourished two or three centuries before him; and this remark may correctly apply to all he advances upon India. His observations on Bactriana, Marginia, &c. he avows to have collected from Demonax; his testimony is not the less valuable on this account, and this slight notice of the ASENI, leads us to the knowledge, that the kingdoms of Porus and Taxiles had been subverted or had passed into other hands, that the PANDAVAS had possessed themselves of the hilly regions, west of and contiguous to the Acesines; and that Bucephalia had risen into importance, and had become the capital of a dynasty.

We had nearly omitted to refer to the monograms of the Beghrám coins. The Greek-Bactrian have chiefly alphabetical ones, which conceal much information, never likely to be ascertained. As the same monograms occur sometimes on the coins of more than one prince, they may be presumed monograms of locality, and may be useful to establish a connection, when other indications are wanting. The Indo-Scythic coins have also monograms, but not alphabetical ones, being apparently emblems of authority and religion.

We refrain in these preliminary observations from many speculations to which the subjects referred to might lead,—because it is possible that future discoveries may tend greatly to clear up the difficulties which attend our present investigations into the antiquities of *Bactria*, and which may induce very different conclusions from those we now arrive at by conjecture. In the memoir of last year we indulged too freely in such speculations, which occasions regret. Nevertheless, in

the subsequent analysis, we have ventured to point out the ideas that have suggested themselves upon reviewing each particular species of coin, not that they may be implicitly adopted, but under the hope, that while liable to correction, they may conduce to promote inquiry and elucidation, and this perhaps is all that can be done until our knowledge is more matured*.

Kabul, December 31, 1835.

Note.—After writing these observations, a copper coin of one of the Arsakian princes apparently, has been picked up, in which the obverse legend is in the exact corrupted characters of the Greek legend of the Kadphises coin, the basileus and the first letters of basileón being distinct: while the reverse legend presents the characters we call Bactrian, but not so clear from the coin being worn, as to allow their transcription with any advantage. Of the characters there is no doubt.

* Mr. Masson confesses in this memoir that he has been too ready on former occasions to draw inferences which subsequent researches have either failed to confirm or have overthrown. The more he avoids such speculations, the more confidence will be placed in his results, because they will be freed from the suspicion of any bias. We could not, however, have ventured to prune his essavs without danger of cutting off what was really valuable, or of robbing bim perhaps of some happy conjecture which might hereafter prove well founded. On the same grounds we have formerly allowed names to stand on bis list, (like Ausios, &c.) which were evidently wroug, and which bis further search has led him to correct. His present elaborate memoir is hardly free from the same objection, for it is yet too early to generalize: nevertheless we do not like to keep back a line of his introduction, replete as it is with valuable information. list of coins to which it is a prelude includes the whole of his former collection, with the additional light thrown upon them by other essays published in the Journal. It would be an useless and expensive repetition to republish these drawings at length, especially when we have not the coins themselves to engrave from.

We trust, therefore, the author will excuse our limiting an insertion of figures and descriptions to those that are new in name or in type. At the same time we shall take the opportunity of adding a few coins from M. Court's excellent drawings, as well as, with permission, some of Kera'mat All's second dispatch (lately purchased by Dr. Swiney) which have not yet appeared: always keeping in view the arrangement of our engraved plates for a general compilation on Indian Numismatology hereafter. Mr. Masson's coins have, we presume, long since been despatched to the Hon. Court of Directors through Col. Pottinger, and we have little doubt that accurate engravings of the whole will there be made by the new ruling machine. We must not omit to make public, that Col. Pottinger most courteously offered to send them all for our inspection en route to England, but we felt it unfair thus to detain them on their journey, while we had Mr. Masson's ample investigation before us.—Eo.

Enumeration of Coins collected from Beghrám during the years 1833, 1834, and 1835.

Greek Syrio-Bactrian.	1833.	1834.	1835.
Antiochus	0	0	1
Recorded Greek Bactrian.			
Euthydemus	1	2	3
Apollodotus	19	31	23
Menander	39	56	58
Eucratides	70	92	107
Unrecorded Greek Bactrian.			
Pantaleon	2	2	3
Agathocles	10	19	14
Lysius	6	5	3
Antilakides	8	16	13
Ermaios the Elder.	34	31	27
Ermaios the Younger, (?)	10	5	13
Ermaios.	1	0	0
Dicaio, (?)	6	14	13
Lion and Elephant coins	20	23	24
& Symbol coins	0	0	11
Unadpherros	. 19	16	20
BAEIAEVC BACIAELIN CLITHP METAC	171	267	257
Analogous coins, fig. 104 to fig. 106	1	1	0
Ditto fig. 107 to fig. 110	8	24	20
Ditto fig. 111	1	1	0
Ermaios of Nysa, and his family	136	179	278
Archelius	0	0	l
Diomedes	0	1	0
Ipalirisus	1	1	1
Antimachus	0	1	1
Adelphortos. (Spalyrlus, J. P.)	1	0	1
Azilisus	0	1	0
Azos*	0	0	0
7 7 7 77 78 7			
Indo-Scythic or Mithriac.			
Kadphises	37 ſ	1	62
Kanerkos	24	0 .	4
Kanerki family	44	ed a	67
Series 3. Obverse, figure seated in native fashion	10	SIL	19
Series 4. Couch-lounger, one foot up	56₹	ese	-175
Series 5. Elephant rider	56	Vumbers not preserved.	73
Series 6. Reverse, bull and priest-okro		Ź	492
Series 7. Very rude—reverse, female with cornucopia	113 L	. j	161
Parthian? and Sassanian.			
As. fig. 1 to fig. 16. Small, head and fire-altar]	[3	4.50
As, fig. 44 to fig. 51. and large, of all types.	161 \{	Do.	278
Kufic and Brahminical	122	J	171

^{*} It is a very remarkable circumstance that none of the coins of Λzos , which were so numerous in the Ventura collection from the $Panj\acute{a}b$, should have been met with at $Beghr\acute{a}m$.—Ed.

III.—New Varieties of Bactrian Coins, engraved as Plate XXXV. from Mr. Masson's drawings and other sources. By James Prinsep, Sec.

Instead of pursuing Mr. Masson's recapitulation of all the coins hitherto found by himself at *Beghrám*, we have preferred selecting those only which were new in name or type for illustration; on the present occasion confining ourselves to those bearing Greek inscriptions of the earlier class, and leaving the Mithriac, of which our author produces some highly interesting novelties, for a subsequent plate.

Fig. 1. A silver coin of Archelius, similar in character to the coins of Menander and Apollodotus*.

Obverse. Bust of king; head bound with fillet or diadem, legend ΒΑΣΙΛΕΩΣ (δικα) ΙΟΥ ΝΙΚΗΦΟΡΟΥ ΑΡΧΕΛΙΟΥ.

Jupiter tonans, seated, holding sceptre in left hand. Compound monogram: the legend in the Bactro-pehlevi character is PATIN PTIAL Phus PLTIO. The name is faint in the drawing, but is read with confidence by Mr. Masson from the coin itself. It may be read A'lakiyo (or jo); but, if the second and third letters can be made 47, the word will represent very tolerably the pronunciation of the Greek name A'kaliyo. The equivalent for Nicephorou is an old acquaintance, Ajalado; but the middle letter is altered in form. The remaining epithet Phu > which I have supposed to be represented in the Greek by dikaiou, is in fact found standing for this title "the just," in a coin of the VENTURA collection figured as No. 9, of Plate XXI. Vol. IV. A more perfect and legible specimen will be noticed below in Mr. Masson's series (fig. 6,) in which the second syllabic letter ψ , (mi) decides the identity: but the initial is more like ξ , n; and the penultimate is ? instead of n; but as the vowel? (a) according to our former observation, never occurs in the middle of a word, it should probably be read I (d) and we should thus have additional evidence of h being the same letter affected with some vowel mark.

Mr. Masson remarks on this coin: "This silver drachma is an unique specimen found at Beghrám in 1835. It is evident that king Archelius must stand high in the list, but there is difficulty in locating his empire: if it be extended to Beghrám, why do we not meet with his copper coins?"

The same epithet, as Mr. Masson points out, may be observed on onc of the Azos group of coins having the horseman obverse (fig. 22

^{*} Col. STACY writes, while we are correcting this proof, that he has just added another name to this group, BANIAEON NIKATOPON AMYNT.... but of this we are promised casts in a day or two: it is too late for the present plate.





of Pl. XXIII. vol. IV.) In our coin the legend was indistinct at the top, but in his drawing it is clearly

יטורצע טורע לשתררצהרצע פאע.

In this the thirteenth letter should probably be \mathcal{P} , unless by some rule of orthography the epithet "just" is combined by a permutation of its final, and duplicated with the commencing consonant of the following word, which may be recognized without difficulty as the representative of *Megalou*, the great. We are indebted to Mr. Masson for the restoration of the inscription, which we have introduced in this place, because no other opportunity may occur of noticing this Azos coin.

Fig. 2. A silver drachma of Antilakides, discovered by Mr. Masson in 1835.

Obverse. Head of the monarch, with the peculiar hat or helmet common on coins of Eucratides, Philoxenus, Menander, &c. but rather flatter: mustachios on the upper lip (?); legend as in the copper coins of the same prince,

ΒΑΣΙΛΕΩΣ ΝΙΚΗΦΟΡΟΥ ΑΝΤΙΛΑΚΙΔΟΥ.

Reverse. Jupiter seated, holding a small victory in his right hand: in his left a sceptre or trident: monogram compounded of the Greek letters P and K: native legend コ州コヤ. ワムコ、こ アムコ、こ ロ as on the copper coins.

Dr. Swiney possesses in the collection lately purchased by him from Keramat Ali, a duplicate of this coin, which shews the completed Pehlevi legend to agree with that given in my former notice. The device on the reverse of the square copper pieces of this prince, two beehives and palm branches, denoting, as Mr. Masson conjectures, plenty and peace, has been met with on a similar coin of Eucratides: in whose neighbourhood, therefore, it is probable the unknown Antilakides should be classed.

Fig. 3. An unique coin of Diomedes, found by Mr. Masson in 1834, and described by him in the present volume, page 24. In the memoir now before us he applies our system to the reading of the native name, which he makes out Piun? ajamido, and argues thence that the Sanscrit equivalent for Diomed may be Ajamedha, a prince of the lunar race, who reigned at Canya-cubja. "This remark," he writes, "is elicited from an observation in Dr. Mill's historical note on the Allahabad pillar, (July 1834,) that the Chronicles of Marwar represent Nayana Pál as having conquered Canouje in the year 470 A. D. from king Aji-pála, a descendant of Aja-medha. We here find a dynasty bearing the common name of Aja (identical with the Greek Azos), and suspected by Colonel Ton to have been of Scythic origin."

We may remark, however, in opposition to this ingenious conjecture, that the Sanscrit name Aja is but a corruption of Ajaya, the unconquered, and therefore might more appropriately represent the Greek anikētos than Azos, which latter I have indeed elsewhere conjectured might be found in the Yavana-asó of Hindu tradition*. Moreover, the first letter of the present legend may probably be I, which would give the reading PIUAI daya-mido, in exact accordance, as to pronunciation, with the Greek.

Fig. 4 is taken from a drawing by M. Court, who has been fortunate in finding a new type of this curious copper coin, the reverse of which usually presents the figure of a naked horse. (See Vol. IV. page 343.)

The present reverse exhibits the prince holding an olive branch and spear, implying peace or war, in either hand. From the collation of many specimens of the horse variety, and one small one like the above, Mr. Masson makes out the full inscription to be BAZIAERS BAZIAERS ATAIR the H apparent at the commencement of the lower line being the missing z of the word BAZIAERS. This reading is confirmed by more than a dozen examples, but it still leaves us with a most unpronounceable appellation. It may possibly be only a perversion of the epithet AIKAIOR. In Masson's small coin the monogram m appears to be the triple blade of a trident reversed, which the figure is holding.

Fig. 5. An unique, is also extracted from M. Court's collection. It assimilates with the numerous class of Azos coins, having on the obverse a horseman with extended arm. The inscription has much the appearance of Pehlevi, but this may proceed from the indistinctness of the Greek letters. The monogram is very peculiar and curious, from the circumstance of its constant occurrence on the degenerate gold coins of the Kadphises group.

The reverse is quite in the Roman taste. Two soldiers seem to be crowning their successful chief, who rests on a kind of club. The name in the legend below is happily most distinct, PT+14A; the fourth letter is doubtful, but if read 4 the combination may be hesitatingly transcribed Yatilariko.

Of fig. 6, three examples are known: one in the Ventura collection was depicted in Vol. IV. Pl. XXI. It was copied hastily, and I

* In the Cashmir list of the Rijtarangini, there is a prince named Axa (transcribed Aj in the Persian of the Ayin Akberi) whose date by Wilson is 100 B. C. but when corrected for the epoch of Asoka, about A. D. 180. He, too, may be one of our Azos family:—but if we go by resemblance of name only, we shall be liable to lay hands on the great Asoka himself as the founder of the line!

have now reason to think I must have omitted a letter, having then engraved the name ADEADOPOY. The two new drawings, one by M. Court, the other by Masson, (both agreeing perfectly,) from which the present engraving has been taken, leave no doubt of the correct reading being EHAAYPIOY AIKAIOY ADEADOY TOY BAZIAEOZ, 'SPALYRIUS the just, brother of the king.' The first letter may possibly be an E, or it may be superfluous, and the name be read Palyrius, but the r on the right hand of the coin is too distinct to permit Mr. Masson's reading of the name ADEADOPTOY, or my former reading BAZIAEOZ NIKATOPOZ ADEADOPOY. It is a very curious circumstance that the prerogative of coining should thus have been delegated to a brother, and we have unfortunately no further means of ascertaining who this indulgent sovereign may have been, further than he probably belonged to the numerous dynasty of Azos and the "great king."

On the reverse we have either Hercules with his club, or more probably, from the attitude, a musician playing on a kind of guitar. The Pehlevi is very distinct on three sides, and in conformity with the Greek on their parallels, the word for "king" is wanting. It would doubtless have been found in the lower compartment. The remainder, borrowing two first letters from Masson, reads Potyahpy Puril (1). All that can be certainly extracted hence is that Prus, as before noticed, is equivalent to AIKAIOY. The name is unintelligible, and the word for brother, Ulafarmo, approaches to no fraternal etymon with which we are acquainted, unless the first letter be I, d, with a vowel mark, which would express something like the Greek itself, delpharmo!

Fig. 7. Here again our author's labours of 1835 have enabled him to clear up one of our doubtful names (Pl. XXI. fig. 6,) and to correct his own reading of last year, (see page 25,) where he supposed it to be ΠΑΛΗΡΚΟΥ. From the native legend I had supposed the word might be read Ulidizou. The real name and title is now made out from six very distinct samples sent to Mr. Masson from Munderaur of Lughmán, which were in excellent preservation, having still upon them the lime cement which had been used in depositing them in some tomb. It runs thus; BACIACHIN BACIACHIC METAACHIT INAAIPICCH, a name which betrays a kind of patronymic affinity to the last mentioned Spalyrius; while in the style of coin there is also a remarkable similarity. The divinity on the reverse is, however, a Jupiter in his celestial chair. The native legend is easily brought to agree with the Greek, through the facile mutation of letters of acknowledged similarity; thus the Au, must be a P, p; and the ¬di must

Figs. 8 and 9. These two coins, made known in Mr. Masson's first memoir, I have now had an opportunity of engraving from specimens in Dr. Swiney's purchased cabinet. The Pantaleon of fig. 8 is quite legible, and the curious and unknown letters of the reverse are distinct, and perfectly accordant with Masson's original drawing. The word ataookaeots however, is only partially visible on fig. 9, and is completed on his authority. In other respects the two coins are identical, having a dog or panther on the obverse, and a clothed female on the reverse, with a flower in the right hand. The similarity of the native character to the alphabet of the Indian láths has been before noticed, as well as the frequent occurrence of the symbols & and & on coins of this group (see Pl. XXXV. of Vol. IV.)

Fig. 10 is introduced from Masson's plates as a more perfect specimen of the Hercules-reverse type than any in my former Plate (XXIV. of Vol. IV.) as regards at least the Greek legend, which is here evidently BAINERS STHPDS SVETMAIDV. This Ermæus differs from his namesake by the reverse, and by the great corruption of the Greek; but it is possible that the piece may have been contemporaneously struck at a provincial mint; and in such case, if cities may be recognized, as among the Greek coins, by their tutelary deities, we shall find a clue to the appearance of Ermæus' name on the following coin, fig. 11, which bears the reverse of the naked horse. It might perhaps be allowable to assign this horse as the armorial symbol of Bucephalia, while the Hercules might be attributed to some town conspicuous for his worship: victory to Nicea; and Jupiter to one of the Alexandrias (being the general reverse of the Alexandrias).

The native legend on fig. 11 is the genuine Pehlevi one of Ermæus; but that on figure 10 is of the modified character so puzzling to the decypherer. It passes unaltered through a succession of princes, and may perhaps therefore embrace only their titles.

Fig. 12. It was from dubious authority that I added the name of KAAGIZHY to this group. Mr. Masson's Researches have now given authentic evidence that I did so justly. He has, this year, fallen upon two coins in which the name is quite distinct. It is remarkable, however, that the title of BAYIAEGY is here for the first time omitted, and the foreign expression XOPANOY introduced. This, it will be remembered, is precisely the transition that is traced in the Indo-Scythic or Mithriac series of KANERKOS; and thus we have pretty

strong grounds for inferring that the change was simultaneously effected in various provinces of the empire of the foreign, (or domestic,) usurpers who supplanted the dynasty of Bactrian descent.

There is, however, another very curious circumstance to be noted in regard to fig. 12. The Greek legend is KDSDVAD KAAAIZDV XDPavov. Now, as good luck will have it, Mr. Neave, of the Civil Service, has just favored me with a few old coins picked up in the mofussil, among which is one in excellent preservation and well executed of the KAAAAES.... kind described in my former paper (Vol. IV. Pl. XXIV.) The name on this coin (which I have engraved as fig. 14,) is very clearly KOZOAA KAAAA.... which is just such a deviation from the orthography of Masson's coin, KOZOAO KAAAIZOT as a provincial dialect, added to the difficulty of expressing native names in a foreign alphabet, would justify and explain. The name on two of the coins of Plate XXIV. Vol. IV. may be also read KOZOAA.

Among several coins of the same class in the collections of Capt. Cunningham and Dr. Swiney, as well as in Masson's plates, other variations of the spelling occur, KOZETAO-KOZOVAO, &c. until at last the word becomes utterly illegible.

In a private letter from M. Jacquet, of the Paris Asiatic Society, that gentleman expresses his conviction, after seeing Dr. Martin Honigberger's coin, that the name we have called KAAAIZHE should be written MokaaaIEHE, which he supposes equivalent to the Sanscrit Mahatrishi; but I think we have abundant evidence against such a conclusion, since we can now produce at least three individuals of the family name of Kadphises. Thus—

Fig. 13, copied from a drawing in M. Court's memoir, has the legend ZAOOT KAAADEX (OV) XOPANOT; while on the gold coins, we have already adduced numerous instances of MO, OOHMO, or OOKMO, attached to the same. We shall take some future occasion to place all these varieties under review together; meantime the French ships of the season will, it is hoped, enable us to profit by the disquisitions of the learned of Paris, on this highly interesting question.

Figs. 15, 16. Small coins found by Mr. Masson in 1835, at Beghrám. The execution is neat and evidently Bactrian, but the names are defaced. The caduceus of fig. 15 is to be met with on the coins of Menander, and particularly on those of Mayos.

It must not be supposed that Mr. Masson's labours during the past year have been productive of no other novel results than those above mentioned. He has brought to light many new types of the Mithriac series, which I shall reserve for a future plate; besides a very numerous series of what he has correctly designated *Indo-Sassanian*

coins, to which hitherto we have paid too little attention. To make their study useful would involve the necessity of reviewing carefully the well known Sassanian coins of Persia proper; a task, unfortunately rendered almost hopeless by the great indistinctness and perplexity of the Sassanian alphabet. I must not, however, on this account, keep back the new and curious coins with Nágari characters of which the Beghrám collection boasts.

In conclusion, I must once more offer the tribute of admiration for the indefatigable and successful exertions of the collector of these Bactrian relics, and express a hope that his extensive collection, now consisting of upwards of 7000 coins, may be deposited in our national museum by the East India Company, to whom it is presumed they have been annually consigned.

IV.—Facsimiles of Ancient Inscriptions, lithographed by JAS. PRINSEP, Secy. &c. &c.

[Continued from page 486.]

Inscriptions from Trincomalee, in Ceylon.

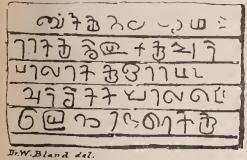
Dr. W. Bland, of H. M. ship Wolf, to whom I am indebted for copies of the three fragments forming figs. 1, 2, 3 of Plate XXVI., has favored me with the following note of their discovery and present situation:

"The three inscriptions are at present in Fort Ostenburgh, which stands on a high rocky tongue of land, forming the south side of the entrance to Trincomalee harbour; these three separate stones have been laid down to form part of the platforms for the guns of the fort. Anciently on the site of this fort stood a venerable temple of the Buddhists, which was destroyed by the Portuguese, and its remains used in the construction of a place of defence. No. 1 is 16½ inches long and 11 inches broad, the letters 11 inch long, with a groove between each line two inches apart. No. 2, the same size, and its composition the same, and although found in a different bastion, has all the appearance of having at one time been united. No. 3, 14 inches long, and 12 broad, letters one inch long, all distinctly cut in the stone, but appears to have been formerly much larger. Great care has been taken to give an exact facsimile of the inscriptions. The slightly marked letters near the end were more worn, and made so in copying. As this may meet the eye of some one conversant with ancient Sanscrit or its cognate dialects, you will oblige those interested on such matters by publishing these inscriptions."

INSCRIPTIONS at Fort Ostenburgh, Ceylon. 1, on a stone slab . 14 inches by 12. letters 1 in. long.

1) 200 car col 14 4 4 6 box box (0) これとののゆるるのり山る男と山りよっと 四月日の十十分はこいによろろいり十十のの 2.33373180m0332127180030 るての出出がいっしいっしいというかん しかのみろいてをしかりすけんとこれののこと いけみしてのからかっているとしていといって みぬて」のようはしてとよりつりしていると 714のみ2つ計山に、人ろんろ20から70

TWO SLABS of Breccie 16 by 11 inches, at Fort Ostenburgh, Ceylon.



74-110094_ ~ LO OF GO & D 1072125 477702 V2 944 JW MM 22 J. Brinsep litte

4. INSCRIPTION at HABURENNI

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5 OFILFWUZZZEUZIWUZZHZW+CLZWZZURWZOOXLEFFFZZW

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naterotermand and setten and materotom .

ու Հարարան արդուն ար

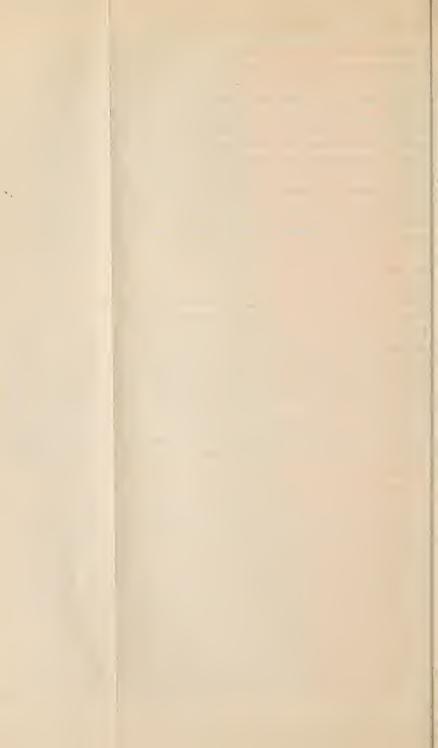
5. Letters of an Inscription, nearly obliterated, on a rock near Kapurdigarki, Peshawer

A Contract A F 3 A P 9 .. φ...Λ. 2 η. Υ... μ... h... Π. 2... γ... Υ ... Υ ... 3...

Letters of an Inscription, nearly obliterated, on a rock near Kapurdigarki, Peshawer

A Contract

A F 3 A P 9 ... φ...Λ. 2 η. Υ... μ... h... Π.. 2... γ... Υ ... Υ



The origin of the fragments of inscriptions found at Trincomalee is similarly explained in Sir A. Johnston's note upon a much longer and more perfect inscription from the same place, published in the first volume of the Roy. As. Soc. Trans. page 537.

The whole of the ancient pagodas or temples of Trincomalee were destroyed as above remarked by the Portuguese in the 16th century, and their materials were used in the construction of the modern fortifications. The late Chief Justice of Ceylon adds:—

"The race of people who at present inhabit the province are completely ignorant of the character in which the inscription is written: they, however, believe from the traditions preserved among them, that it is the character which was in use throughout the whole of the northern and eastern parts of the island in the age of the two kings of Solamandelam. MANUMETHY CANDESOLAM, and his son KALOCATA MAHARASA. who are stated, upon what authority I cannot ascertain, in all the ancient histories of Trincomalee (of which I have in my possession both the Tamul originals and the English translations) to have reigned over the southern peninsula of India and the greater part of the island of Ceylon about the 512th year of the Kaliyug, or 4400 years ago*, and during his reign to have constructed not only these magnificent temples, but also the equally celebrated tanks or artificial lakes called Kattucarré, Padvilcolam, Minerie, and Kandellé, the remains of which may be considered as some of the most venerable and splendid monuments ever discovered."

There are three traditions respecting the contents of the long inscription. I, that it contains an account of the taxes which the priests of the temples of Trincomalee had a right to levy, and of the expences incurred in the buildings: 2, that it contains an account of the construction of the great tank: and 3, that it contains the heads of the civil and criminal laws of the country.

However this may be, it is not likely that we shall very speedily be able to benefit by the preservation of this curious document, unless an actual facsimile be substituted for the manual copy published in the Transactions. It is evident from the form of many of the letters in that, and in Dr. Bland's fragments Nos. 2 and 3, which have a strong resemblance to it in the lines drawn between each row of letters, that these are in a form of Nágari not very different from that of our early láth inscriptions, and there is little doubt that an accurate transcript would prove legible. Dr. Bland's No. 1 is apparently much more

* The names above given are doubtless TIRAMADI CANDA SHOLAN and CARICALA of the Sholan dynasty of Karnátá, of Buchanan. According to Turnour, the Sholan conquest of Ceylon took place in the year 104 B. C.—ED.

modern—it is so like Tamul in many letters that I think a Madras pandit would find little difficulty in decyphering it.

Other inscriptions from Ceylon, Pl. XXVI. XXVIII.

The preceding note has called to my recollection a number of other fragments of inscriptions in nearly the same character which were sent to the Society in 1833* by His Excellency Sir R. W. HORTON. They were collected from various spots in the *Matele* district by Captain Forbes, as marked on the accompanying plate: and, His Excellency says, thousands of the same nature exist on the island.

The inscription from Haburenni offers the best chance to the decypherer from its very perfect state:—In the 4th line I read with ease the words paramara Mahárája....Srí mad....Vijaya Patísara puta deva. The same word \(\subseteq \subseteq \text{wijaya}\) occurs very frequently in the course of the inscription. It is a name of great celebrity in the Ceylonese history, as the founder of the carliest dynasty. The opening letters of the inscription are precisely such as appear on our first Canouj coins:—they run Mujenagama...

I am not aware whether the inscriptions so successfully decyphered by Mr. Armour, and published in the Ceylon Almanac, include any of this class—but I presume not, as they generally refer to periods much more recent, as the reign of Sahasa Malla, in the 12th century, when we know by the coins discovered at *Dambedinia*, that the Nágari hardly differed from the present form. Moreover, they are stated to be in the Cingalese language.

Inscriptions from the Caves of Ajanta, Pl. XXVIII.

When I inserted in a former Plate (IX. see page 348) the rude facsimile of an inscription taken for me by Messrs. Ralph and Gresley, I forgot that I had in my possession several of a similar nature collected by the same parties during a visit to these caves some years ago, which were in vain shewn to the pandits of Benares and to the Secretary of the College there.

Not being aware that the measurements and drawings made by Dr. BIRD for Sir John Malcolm have ever seen the light, while the brief notice and rude sketch published by Lieutenant Alexander in the second volume of the Roy. As. Soc. Trans is any thing but satisfactory, I think it but tardy justice to put on record the materials so kindly communicated to myself.

One inscription (fig. 11) was taken with red paint on cloth from the base of a large statue of Buddha, and, curious enough, we here again trace the three initial letters "ye dharma" of the Buddhist formula; but

^{*} See Proceedings As. Soc. 30th Oct. 1833.

JOHTA. As. SOC Inscriptions from Certon, continued.
6. SIGIRI FURIEF BUPICOTICE CEA6ccf5ひ牛1のリロイクらせんらま ~56578003759566675 TESTOUGED STABSSIDIA, US ----- P32XFUBFG LEPPOL SO ROLLOVALY JOURNATION OF 41001101601 1んっ土 · 600 ·· 3400 - 1701410411619 たられた 1765-40-1 200 LXTWN SHYD 8001TAONS CO NPHSMUS **のTXVDQAPL-CSTPUS-XPOOSTHU**を MASSACC 一つからく からえた 一のよろのとしているとう! ST LOX PHOC 40UX Y ... MYKT ロヘら TOUTTOUZT - USO ... 25T 8. from ALUE VIHARI. アクタレー シな レガイ +11-4 Forbes, del 5. 2. 1.74 9. Lower part of an Inscription in the Zodiac or Shield Care at Ajunta प्रकृत्य है स र प्रकृत के स र प्रकृत है स भीट पर म ह राष्ट्र करें द हां सार भ पः।। 10. Inother from the same care (supposed to be more modern) gn? 노노젊2세ㅁ따~9찬ở2880g과돲쥧255Y숙관율상환요뒤급제3급 찲보i This portion 1378883800089348403274653 प्रदेशका का देश हुत का कर हो। estaced. र प्रशास्त्र विषय के स्वास्त्र है। यथप्रद्वाधिया। 11. Another Inscription , taken in facsimile from the stone 今20日前四月月日至3日日本日本日本日本1210111-Ralph & Grealey des J. Prinsep 114



the remainder is unintelligible, although the value of many individual letters can be readily assigned.

The fragment (fig. 10) in the parallelogram-headed character, (of which an alphabet will be furnished under a subsequent heading,) is all that remains of what was once a long inscription in the zodiac cave. It is therefore useless to transcribe it in modern character, which might easily be done for the major part of the fragment.

But it will enliven the dry recapitulation of such particulars to introduce the reader to the romantic scene whence these antique relics were derived, in the very language of Mr. Ralph's most animated and scenic correspondence—written as he clambered up the precipitous and crumbling entrance, and threaded his way through the recesses of the hollowed hill by the light of the brahman's torch.

"On the 6th of the month I left Aurungabad, and went seven marches eastward that I might join Captain Gresley, and induce him to come hither with me. When I found him on the 13th, we were near 50 miles from this place, to which we came in two breakneck marches, galloping over stony roads and rocky torrents at the rate of ten miles an hour. We then rested one day, and on the 18th arrived here at 9 a. m. During the two last days Gresley has been with me, and his exclamations of admiration and regret, the mere variations of wonder,—would fill three pages. The paintings, which are fast fading and falling away, demand consideration. There is nothing in India like them. They give us glimpses of a former world—but, alas! how industriously these valuable and beautiful remains have been by violence destroyed! I shall now rapidly throw together my companion's observations, among which are all mine, in which he agreed. You know! I have no knowledge of painting or design—only a perception of what is beautiful; but you must have remarked his skill in drawing and good taste in every thing.

"These caves are becoming daily more difficult of access. You pass along narrow goat paths with a chasm of 50 or 80 feet below, the footing not nine inches broad, with scarce any thing to cling to. The rains yearly making the passages worse. G. and I admired the fires on the hill above us: grass and leaves burning all night. What followed? Why, last night every hour and oftener, stones and burning rubbish, large logs half consumed, rolled down close to the tent, and this morning the ascent proved more difficult. One cave is inaccessible, and several are approached at the risk of life.

'What a wonderful people these must have been! Remark the head dresses. Now, is this a wig or curly hair? All the statues, the curved figures of BUDDHA have them. How can I say? First wigs were made to represent hair, and then hair dressed to look like wigs. 'Tis the shape of your Welsh wig, and rows of curls all over. Then the head dresses and ornaments are different from every thing we now see. These are chiefly domestic scenes—seraglio scenes;—here are females and males every where, then processions and portraits of princes which are always larger than the rest. The subjects are closely intermixed;—a medallion is twelve or fifteen inches in height; below and above, closely touching, are other subjects. I have seen nothing monstrous. No, certainly, there is nothing monstrous except where we see some figure evidently designed

for ornament, as in the compartments of the ceiling. The ceiling—aye, every thing but the floor and larger statues and small figures—every thing has been painted. It is done while the plaister is wet—it is fresco painting. I have seen the operation while going about in Rome. It has been dug off, scraped and knocked off with iron instruments. See how the stone itself has been broken!

Now, RALPH, look here: can you see this figure? No. Bring the torch nearer. Give me the torch. You can see it better now-hardly! Let us light dry grass. Bring grass now: place it here. Now watch while the light is strongest: you may now see the whole figure. This is a prince or some chief. It is a portrait. Observe how well fore-shortened that limb is-yes, I can see it now; but throw water on it-now the colours are more vivid. Here is a lovely face-a Madonna face. What eyes! She looks towards the man. Observe, these are all Hindu faces-nothing foreign. All the sweet countenances are of one complexion. R., now remark. Here are evidently three beauties in this apartment-one an African, one copper-coloured, one of a European complexion. Yes; and how frequently we see these intermixed. See this, R. is a fair man-yes, I think he is a cunuch. Another: -he has his hand round her waist, and she one hand on his shoulder. Observe; many love scenes, but little gross or grossly indecent: no nudities-nothing like the shocking sculptures on the outside of the temples in Telingana. This must be the inside of a mahal. Here is a woman on a charpae or some stage with legs: See, they are bathing her: do you observe the ghara of water in the woman's hand above? How well executed that figure is; the fore-shortening of the arms; the waist-are not her haunches too full? No. Go farther off, and you will see the figure in a better light: it is correct. This beauty has delicate drapery-nearly falling to the knee: it is transparent, like sky-Observe that Abyssinian black prince seated on a bed ;coloured gauze. remark his ornaments. Now the woman seated on his left knee whom he embraces is as fair as you or I. Did these fellows get Georgian slaves? He has two boys or pages to fan him. I wish I could make out this story-there certainly is a story. Here is a fair man of full age, dressed in a robe and a cap like some monk or abbot. Here is next to him a half naked brahman copper-coloured, with shaven crown and the single lock on his head. Here is a man presenting bim with a scroll on which something is written. He is in a crowded court-he has come to an audience. What can all this be? This is a procession :- the elephants are passing under the windows, and women are looking out. I think they evidently express alarm. That one has her hand up, as making some exclamation.

How often we see people of three complexions in the same pannel! Now this is the most extraordinary thing we have found. Here are three placid portraits—they are Chinese. Nothing can be plainer:—observe the style of the hair;—the women have locks brought down in ringlets over the ears falling on to the neck, like some of the Hampton Court beauties. Observe the head dresses: there is something like a bandeau—yes, a muslin band, or the imitation of a turban by English women. The cap worn by the chiefs or nobles or princes is a tiara loaded with pearls mostly conical. Round the waist is a cloth, but it is not so full as a dhot!. A sort of jhangla worn by the women, coming nearly to the knees, and this drapery often transparent. Are these paintings as well done as Europeans could have executed? In the expression of the countenances certainly they are. The perspective is not good, and the pieces are crowded:—yet here is a small building, the perspective of which is quite correct.

Small buildings, such as are open to a garden with light pillars, are the principal domestic scenes: few or no trees. In two pieces are parties in a boat—the prow and stern both very high. Here is a hunt;—here is a horseman and dogs. I do not like the horses we see—rather poor. These are elephant-fighting;—that head is sublime.

Now, R. remark this saddle;—here is a led horse, and the saddle exactly such as we see in England with a cloth below it—nothing larger—and the bridle too. This is a war scene—here are many spears.

This zodiac, as they call it, is very elaborate. Why they call it zodiac I know not. There is in one part a bull, and in another scales. We must get a ladder to see it clearly. It might have been called the shield of Achilles as well as a zodiac. There have been eight grand compartments and sixteen smaller ones—how full of little figures! I think this is the best example in the whole series, and evidently done by the same painters who worked in what we call 'par excellence' the painted caves. These medallions in the roof are very handsome. I think they resemble compartments in a Turkey carpet, or what we see in a kaleidescope—wreaths and coloured radiated patterns. Here are five women with their feet all towards the centre of the circle:—their heads alone perfect. Are they angels? There are no winged and no two-headed figures anywhere.

The zodiac is incomplete. I think about a third of it is wanting, and the lower part of the circle could never have been complete, for it must have been over this door of the cell. G. Perhaps they covered the top of the doorway with something in order to complete the circle. R. You admire it so much: you are willing to suppose it must have been complete.

What a lovely female! Yes, the last one we discover seems always the sweetest. Here is another heavenly face. This man is her lover:—a handsome fellow. You have his profile looking to the left. How eager—how full of ardent desire! The woman has just turned her face towards him, and looks with timid satisfaction and self-approving coquetry. It is excellent. But here is another beauty:—she is entreating: her head is turned towards some one above. Is she supplicating or in prayer? Shame to the villains who have destroyed these paintings!

These must have been convents, and these decorations to attract the multitude at festivals and to bring pilgrims from afar. This cave was never half finished. I can fancy that the site of a cave was granted to a society of monks with lands for their support. These, according to their ability, made it large or small, filled it with paintings when able to incur the expense.—The fewer theories you form, the fewer blunders and dreams you will make.

- R. We must form theories—we cannot remain awake and not do so.
- G. Some nation of conquerors who landed at Elephanta, coming from Egypt, first began there, and then got 2 or 300 miles to the eastward. There is nothing like these in Telingana or to the south.
- R. No—only some very small caves with sculpture, rude and old,—the cave being as big as one of these ten cells. But the fewer theories you make, &c.

Now, Ralph, look at this! Why, you are half dead—no, not half dead, but knocked up. When you have 25 years added to your present age, and have completed 30 years in India, will you labour so well or have so much zeal? 'Tis five to one against my being alive.—But do get up and come hither. This man is going to ravish this woman;—he has a sword, too, in his hand. Here

are other armed men. Is it the sacking of a city? See how the water brings out the colours,—but I have given Prinser more than two hours. Have they brought the oil? and the ladder,—they are all here.

21st.—A Dr. Bird from Sattarah, the Residency Surgeon, come with a design to draw up some account of the caves, dismounts from his horse at 8 A. M. Mutual greetings. In three minutes my new acquaintauce praises Mr. Erskine of Bombay; quotes him and swears by him, and tells me, 'These are Jain cave temples, and, like most others in this part of India, are dug in basalt. This is amygdaloid basalt: you see it incloses masses of quartz.'

Dr. B. says he has brought a learned pandit to examine the inscriptions; that he is about to draw up an account for the London Asiatic Society, and carry away some of the paintings by taking from the wall. Can you draw, Sir? 'No—I am sorry I cannot.' Those who come here with that qualification are disheartened by the difficulty, or have other occupations which demand their attention, (as G.)—As for carrying away the paintings, you can do so in powder. I have ascertained that they will not quit the walls in laminæ, but crumble under the touch.

'I am sorry for that. I think a native painter might succeed in copying them.' Certainly he might—but you must attend on your native painter, to give him confidence. This is a wild secluded spot, within a mile or two of the frontier; barren rocks and chains of hills E. and W. The nearest inhabited place is a poor hamlet three miles off. We find marks of recent fires in the caves and caverns, and know that small parties of migratory predatory Bheels who lift in these parts, haunt the caves, which are very seldom visited*.

Dr. Bird's so-called pandit proves to be a Marhatta brahman:—can make nothing of the inscriptions—supposes them written by the Jains.

G. For my part, I think it is the character I have seen on the pillar at Allahabad, and on the column at Delhi, which no one can decypher. On the left of the portico to the zodiac cave has been an inscription four feet high and one and a half broad—the left and lower part utterly effaced by the weather. What remains, may afford a few whole words to one who has the key; (see Plate XXVIII. No. 10). Under the foot of a colossal statue, there is part of an inscription, perhaps half a name:—outside another cave. In the zodiac there is some writing—and in the same cave one figure holds out a scroll on which the writing may be legible.

Mallet's figures in the Asiatic Rescarches would lead a stranger to expect statues—but the figures are entirely in alto relievo. Almost the only novelty is the thing I call an altar: it is nine feet high. There are four altar caves, or, as folks call them, carpenter's + caves. The first has the figure just mentioned at the back. In the second the altar differs in having an intermediate circle or section of a cone—another globular mass.

[* Capt. Ovans visited in March 1827; Mr. Laing saw two in July; Capt. O., Mr. G. Giberne and Gresley were here in February 1828; Mr. and Mrs. R. on the 8th of that month; G. and R. 18th and 19th of the current month; and, lastly, Dr. Bird, an intelligent young Medical man from Bombay. Lieut. Alexander of the Lancers visited them in 1824.]

† From the tradition regarding VISVAKARMA'S having constructed them in a night. See Sir WILLIAM MALLET'S description of Ellora, As. Res. VI., 389.

In the third small cave, 45 or 50 feet by 20 to 24, is a more elaborate altar (dehyopa), having three globes superposed, and each stage ornamented with four pillars—on the top four figures, now much worn, supported a canopy, (evidently the ordinary Buddhist Chaitya.) But all these desultory descriptions and fragments of conversation can be of no use but to stimulate you to come hither, &c. &c.'

In the same graphic style our visitor describes the kund or reservoir at the foot of cliffs 250 feet in height—and the Dehgopa or Buddha cave. Dr. Bird found no less than 25 chambers, some in an unfinished state and now covered with earth. Notwithstanding protestations about defacing monuments, this visitor contrived to peel off four painted figures from the zodiac or shield! To have copied the whole, even had he been an artist, would have taken twenty days. Of the fresco figures, in three divisions of the shield, were extant in 1828, 73 figures varying from 5 to 7 inches high. It is a great pity that none of our European tourists, whose pencils every year produce such exquisite bijoux, can be persuaded to make a visit to Ajanta, before the remainder of these treasures of antiquity moulder away with the damp, or fall a prey to the hand of the spoiler.

V.—Sketch of the State of Múar, Malay Peninsula. By T. J. Newbold, Lieut., A. D. C. to Brigadier General Wilson, C. B.

The information contained in this paper was obtained partly from personal observation, and partly from inquiries made while on a visit to the chief of the country at *Gressik*, on the *Múar* river, in 1835.

The state of Múar lies to the south of the Malacca territory, from which it is divided, towards the coast, by the Cossang river, and interiorly by a suppositious line drawn between Bankon, Chondong and Mount Ophir. The Serting river separates it from Pahang,—Parrit Síput from the tract of Dattu Kúya Padang—and the Murbówe Sa-ratús from Johóle.

Population.—The interior of Múar is generally termed Segámet. The united population is stated not to exceed 2,400. This appears extremely scant compared with the extent of territory; and arises from the misgovernment and apathy of the feudal sovereign, the Sultan of Johóre—whence perpetual broils among the petty chiefs, causing insecurity of person and property, and eventually desertion of the soil by most of the cultivating and trading classes of the community. The honest peasant, in many instances, is compelled from sheer necessity to turn robber; and the coasts, instead of being crowded

with fishermen, swarm with pirates. These remarks may be applied generally to the whole of the peninsula under native sway, though to *Múar* more particularly; the whole of which country appears to be one almost uninterrupted mass of jungle and swamp, if we can except a few straggling villages and clearings. Cultivated rice grounds have degenerated into barren marshes—an enormous forest, abounding with wild elephants, overshadows a soil naturally rich and prolific; while the gaunt rhinoceros and uncouth tapir stalk unmolested over spots which, if tradition belies them not, were once the sites of large and populous towns.

Such is the melancholy picture of the effects of misrule which this unhappy country presents to the eye of the traveller, who cannot avoid being sensibly touched by this forcible, though silent, appeal for melioration.

The principal villages are Bokko, Langkat, Gressik, Ring, Segámet, Pagoh and Pangkálang Kóta, the residence of the chief, on the river,

Produce and Revenue.—The produce of the country consists of a little rice, sago, ivory, ebony, gold dust, tin, wax, aloe-wood, gum benzoin, camphor (small in quantity and of inferior quality), ratans of the kinds Battu and Jagga, Dammer Battu, Dammer Miniak, jaggery, Lakko wood, and Gulígas, stones extracted generally from the heads of porcupines, and in much repute among Malays for medicinal purposes.

The chief has been empowered by the late Sultan of Johóre to levy an impost upon every bhar of tin exported, of $1\frac{1}{2}$ Spanish dollars.

One hundred bundles of ratans,	1	do.	do.
One bhar of ebony,	$l\frac{I}{2}$	do.	do.
One koyan rice imported,	2	do.	do.
One koyan salt ditto, :	1	do.	do.
One katti of opium ditto.			do.

On smaller articles he levies a duty of 5 per cent. He has the power of exacting the gratuitous labour of his subjects, and derives some emolument from the fines he inflicts on them at pleasure.

Government.—Múar is under the sway of a chief bearing the title of Tumingong, who is a vassal of Johóre. Under the Tamúngong are eight Panghúlús, four of whom are styled Ampat de Ilir—the remainder, Ampat de Ulu. The former are the Panghúlús of Gressik, Bukit, Ráya, Liang Battu, and Ring;—the latter, those entitled Besar, Tanjong, Daggang, and Muncal. There is nominally a mosque under each Panghúlú, but in that of Umbum alone is the Juma-ahad held. This is in the jurisdiction of the Panghúlú besar. The customs enjoined by the code termed Undang Undang Maláyu; and the Mahommedan law

of succession obtains, to the exclusion of the Trómba Pusáka prevailing in the four Menangkábówe states.

History.—Múar, like the rest of the Malay peninsula, was formerly inhabited by savage aboriginal tribes, among whom the Jacoons seem to claim the superiority. With regard to its origin, it is stated in the Sejára Maláyu that Srí Iscander Shah, the monarch of Singhapára, on his city being taken by the Bitára of Majapahit, fled to Múar. This event took place about the middle of the 13th century; and it is asserted that he left one of his Mantris in the interior of Múar.

No more mention is made of this state until near the middle of the 14th century, when the kingdom of the Sultan of Malacca, Mozaffer SHAH, was invaded by the Siamese under T'HAWI CHACRI. The Sultan on this occasion directed a levy of the population of Múar to be made, and the inhabitants to be assembled at Malacca. According to the Malay annals, the war between Siam and Malacca "continued for a long time, and great numbers of the Siamese perished; but Malacca was not reduced. At last the whole Siamese army retreated, and as they took their departure they threw down large quantities of their baggage ratans in the district of Múar, where they all took root; and that is the origin of the name Rotan Siam. Their stocks, which were formed of fig-tree wood, likewise took root in a place in the vicinity of Múar, where it still exists. The rests for the Siamese cooking places also took root and grew up, and are to be seen at this day at the place named Tumang Siam." I was unable to find out the locality of the places here mentioned by the author of the Sejára Maláyu, though every inquiry was made near the spots where these scenes are said to have occurred. The tradition, however, of the defeat of the Stamese was universally current. In 1511, Ahmed, Sultan of Malacca, on his city being taken by the Portuguese, retreated up the Múar river to a place called Pagoh, about 15 or 16 miles from Gressik, now under the Panghúlú besar, Inchi Muit. Sultan Mahmu'd remained at Battu Hampar, and founded a fort at Bentayen. According to the Sejára Maláyu, the Portuguese pursued Ahmed up the river, attacked and took Pagoh. AHMED fled further up to Panarigan, near Jompole, and thence, accompanied by MAHMUD, repaired to Pahang. The latter subsequently established himself at Johóre. Many of their adherents remained in Múar and Segúmet, and in course of time erected a primitive form of government, directed by four elders, styled Tuah Campongs, who ruled under the Sultans of Johóre until 1119 A. H. The four campongs were those of Payoh, Sungie Ring, Sungie Terap, and Gressik.

A. H. 1119. A Mantri of high birth in Johóre, named Samade Rája, obtained a grant of the territory of Múar from the then Sultan

of Johore, Abdal Jalil Shah III. He settled at a place called Pantei Layang on the banks of the river, and ruled till 1145 A. H., when he died succeeded by his son Padu'ka Tuan; who, on his proceeding to the court of Johóre, on the occasion of his father's demise, was invested by the Sultan Abdal Jalil with the title of Tumúngong Padúka Tuan. He died A. H. 1175, succeeded by his son Burok or Ahok, who was confirmed by Sultan Abdal Jalil Shah IV., then resident at Rhio, whither he had removed from Johóre. Burok died at Búnga Tanjong on the Múar river in 1214 A. H. leaving two sons, Konik and Ibrahim. The former went to Lingga to present himself to Sultan Mahmu'd III. by whom he was acknowledged as third Tumúngong of Múar.

Konik died in 1246, A. H. leaving a son named Syed, the present chief, who succeeded him: he also left a daughter. Syed proceeded to Singapore, where he was confirmed by the late Sultan, Hussain Shah I., whom the English had recently placed on the throne of his ancestors. From him he obtained the title Tumúngong Dattu Syed.

It would appear from what has been advanced above, and by the subsequent Boundary treaties, that M'uar has always been feudal to the Sultan of Joh'ore since the time of their ancestors, the ancient sovereigns of Singapore and Malacca. The Dutch, however, when in possession of Malacca, appear to have claimed M'uar, as in the map of VALENTYN the boundary line of the Dutch territory is made to extend so far beyond the M'uar river as the $Rio\ Formoso$.

The Tumúngong's sway is confined to the villages immediately on the banks of the Múar river and on those of the stream of Segúmet, which empties itself into the Múar about 12 miles above Pankálang Kóta. He appears to be popular from his easy temper, and the inhabitants feel alarmed at the idea of any change being made in the government by the Sultan of Johóre. We had an interview with this Malay chief at a village, about 18 miles up the river, called Gressik. He acknowledges himself a vassal of Johóre, and sends annually to the Sultan the amount of a duty levied on the houses of the settlers at Padang (one dollar per house) and 200 gumpits of rice.

Malayan Albino.—On landing at Gressik I was struck by the singular appearance of a Malay lad, an Albino, standing under the shade of a tree on the river bank. His skin was of a reddish white, with blotches here and there, and thinly covered with short white hairs. The eyes were small and contracted; the iris of a very light vascular blue; the lids red, and fringed with short white lashes; the eyebrows scant and of the same colour; the pupil much contracted from the light. On calling him to come near he appeared to be ashamed.

He evinced an extreme sensibility to the stimulus of light, from which he almost constantly kept his eyes guarded by shading them with his hands. He told me he could see better than his neighbours in imperfect darkness, and best by moonlight, like the "moon-eyed" Albinos of the Isthmus of Darien.

He is morbidly sensitive to heat: for this reason and on account of the superstitious respect with which the Malays regard him, he is seldom employed by his friends in outdoor labour, although by no means deficient in physical strength. The credulous Malays imagine that the Genii have some furtive share in the production of such curiosities, though this they tell as a great secret. To this day the tomb of his grandfather, who was also an Albino, is held sacred by the natives, and vows (niyats) made at it. Both his parents were of the usual colour. His sister is an Albino like himself.

Albinos, I believe, are not common on the peninsula, nor are there any tribes of them as, according to Voltaire, exist in the midst of Africa. In the only two instances I recollect observing, the eyes were, in both, of a very light blue; the cuticle roughish and of a rosy blush, very different from that of the two African Albinos seen and described by Voltaire, and quoted by Lawrence; "Leur blancheur n'est pas la nôtre; rien d'incarnat, nul mêlange de blanc et de brun, c'est une couleur de linge, ou plutôt de cire blanchie; leurs cheveux, leurs sourcils sont de la plus belle et de la plus douce soie; leurs yeux ne resemblent en rien à ceux des autres hommes, mais ils approchent beaucoup des yeux de perdrix." Essai sur les Mœurs.

WHITELAW AINSLIE, in his description of the Albinos of continental India, ascribes to them the same delicacy of constitution and shyness observable in the Malayan Albino, and that they are seldom known to live to an advanced age. The females, he remarks, rarely bear children; but when they do, their offspring is of the natural colour of the cast to which they belong.

Observations on the Muar river.—The Muar river at the mouth has an apparent width of about 600 yards, and at Gressik 18 miles up the stream is about 100 yards broad and 7 fathoms deep. The soundings at the bar varied from $\frac{3}{4}$ to 4 fathoms low water. The current ran at the rate of $2\frac{1}{2}$ miles an hour. It has its rise, according to the natives, among the mountains of Jellaboo, and falls into the sea about 30 miles south-east of Malacca. From these mountains the Serting river, which disembogues itself into the China sea at Pahang, and the Calang river, which flows into the Straits of Malacca near Salangore, have also their rise. The general direction of the Muar river from the

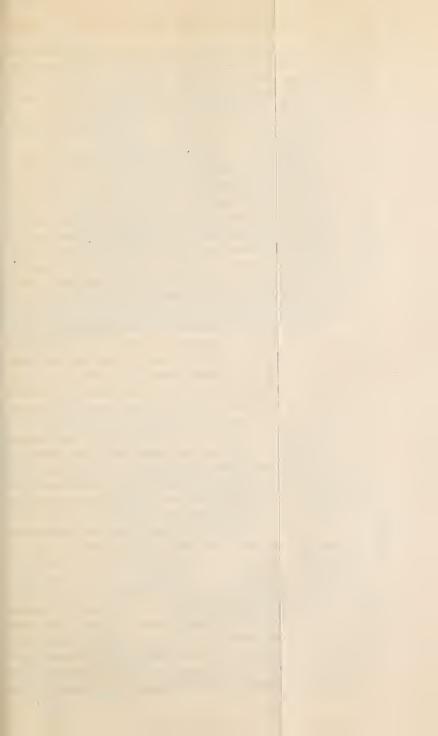
mouth to Gressik we found to be N.E.—its course tortuous, the banks for the most part low, muddy, and covered, with the exception of the vicinity of villages and a few Ladang clearings, with dense jungle. Among the trees near the river's margin we observed the mangrove, the Nipah palm, (the Nypa fruticans of Thunberg,) the Nibong, (the Areca Tigillaria of Dr. Jack,) the Api-Api, (Pyrrhanthus Littoreus,) the Pedada, the Neridi, and the Búta-Búta.

The water of the river was more turbid than that of the Lingie, which might be owing to the freshes from the hills. The paucity of cultivation, thinness of population, and the almost total absence of trading boats and even fishing canoes on the river, could not fail to strike the most careless observer. By this river there is a communication, almost all the way by water, with the eastern coast of the peninsula, frequently adopted by the Pahang traders. The navigation was formerly under the control of a Bugis chief named UNKU' KLA'NA, who settled at the mouth of the river; and, after him, under his son Rija Issa: but on the return of the latter to Rhio in 1826, it reverted to the Tumúngong.

In former days the mouth of the river was a noted place of rendezvous for the fleets of the Siamese, and in later times of the Malay princes, in their attacks on Malacca during the Portuguese and Dutch administrations. The last instance occurred in 1784, when $R\acute{a}ja$ $H_{\Lambda DJ}$, the $M\acute{u}da$ of Rhio, anchored there with a fleet of 170 prows on his way to invade Malacca; an enterprize in which he lost his life.

Gold Mines of Bukit Ráya.—Gold dust is found a short distance from the left bank of the river at Bukit Ráya, a low hill covered with forest, which was pointed out to us by the guides. There were, we were told, formerly gold mines on and at the foot of this hill worked by Malays, who were compelled to quit them through the exactions of the petty chiefs. The Tumángong had brought down with him in his own boat to Gressik, two Chinese miners, with the view of ascertaining whether any mining speculations there would be likely to turn out profitably or otherwise. I have not heard the result. Tin is also found near Bukit Ráya.

From Gressik we saw a range of hills at a great distance running down the peninsula in a south-easterly direction, one of the highest of which is called Siang-battu, the Cave of the Rock. From this mountain, the natives affirm, flow the rivers of Battu Pahat, (the Rio Formoso of the Portuguese,) Pontian, Undówe, Roompin, Bennoon, and Johóre; the last of which streams empties itself into the sea at the extremity of the peninsula: on its left bank stood the capital of the



Statue of SILENUS discovered by Col. Stacy.





FRONT VIEW

Malay empire of Johóre. This range of mountains seems to be a continuation, if I may so term it, of the broken chain running down the peninsula through the States of Quédah, Perak, Salangore, Súngie-ujong, Rumbówe, Jellaboo, and Srimenanti, terminating near Point Romania, and probably having their origin in the lofty ranges which overlook the vast steppes of Northern Asia.

VI.—Note on the discovery of a relic of Grecian Sculpture in Upper India. By Lieut.-Col. L. R. Stacy. Plate XXXI.

[In a letter to the Editor, dated Aligarh, 29th February, 1836.]

I have the pleasure to enclose two sketches exhibiting the obverse and reverse of what appears to me a Grecian periranterion $(\Pi_{\epsilon\rho\iota\rho\rho\alpha\nu\tau\eta\rho\iota\nu\nu}(1))$ in stone (Italian, tazza*). The block, which is three feet in width, three feet ten inches high, and one foot four inches thick at the base, is of the hard red sandstone with white spots, which is found so plentifully in the Agra district, particularly in the neighbourhood of $Fattehp\acute{u}r$ $Sikr\acute{\iota}$, and of which the greater number of the ancient buildings at Agra are constructed.

This relic was given to me by a friend at *Mathura*: it is in a very mutilated state, but fortunately sufficient development of it remains to determine, I think, its original character and use.

The obverse represents SILENUS inebriated; he is reclining on a low seat or throne, supported on either side by a young male and female Grecian. Two minor figures support the knees: the attitude of SILENUS, the drooping of the head, the lips, and powerless state of the limbs, give an extremely accurate representation of a drunken man. The figures of the youth and maiden are also in appropriate keeping. The whole is evidently the work of an able artist, who could not possibly, in my opinion, have been a native of Hindustan.

The reverse appears to have been executed by a less skilful person, and the figures carry an Indian style about them. The back-ground represents a grove, and the trees are loaded with fruit. Four figures are conspicuous in front: on the left hand a Grecian girl, with short tunic and loose drapery falling to the ground; her sandals are ornamented; her right hand is grasped by the right hand of the figure next to her, a young man, whose apparel is confined to a jhangi: he has a kerchief round the neck with a tie in front as worn by sailors. Next to this is another female in a Grecian dress: she would seem to right, who is in the act of putting on woman's attire. The bracelets

⁽¹⁾ Vide POTTER'S Grecian Antiquities, vol. i. pp. 224 and 262.

^{*} Vide MosEs' Antique Vases, Pl. 95.

be highly amused with the person (a young man) immediately on her of this female reach half way to the elbow, and are most elaborately and beautifully executed, but the appearance of this figure is less elegant than that on the extreme left. At the feet of the group are goblets. The heads of the figures are bound with vine leaves.

The figures on the obverse are on a larger scale than those on the reverse: the deficiency on the reverse is supplied by trees, forming a grove. The whole supports a circular bason or font measuring sixteen inches in diameter, and which must have been originally about eight inches in depth. As already noticed, this relic is sadly mutilated, and it is probable the bigotry of Muhammadans, (who perhaps considered the work connected with Hindu idolatry,) occasioned the injury done to the faces and breasts of all the figures and a great part of the bowl. Enough, however, remains to identify it as representing a scene in the Bacchanalian festivals.

For the present I will simply add, that should this piece of sculpture prove to be what I conjecture it to be, the correctness of Wilton and Jones' (2) opinions will be strongly evidenced, when they asserted a similarity of the gods of the Greeks and Indians, and that this led to intermarriages, and thus the former merged into and were ultimately lost sight of in the Indian community. (3)

Note.—The discovery of a piece of sculpture bearing evident reference to Greek mythology, if not boasting as unequivocally of the beauty and perfection of Grecian sculpture, might excite less surprize after the elaborate display we have lately had of coins found in Upper India and in the Panjab with Grecian legends, and a combination of Hindu and Greek deities. Yet, in fact, the latter offer no explanation to the former-on the contrary, they relate exclusively to a period comparatively modern, when the worship of Mithra spread through the world with the rapidity of the element of which he was the type, and superseded in a great measure the more ancient superstitions; whereas the worship of Bacchus-or of Silenus, his wine-inspired counsellor, must belong to a much more remote periodnor can we trace any clue to it in the present mythology of the Hindus. True there have been traditions preserved in the West, of BACCHUS' expedition to India, and of the easy conquest every where following the steps of the hero who could make rivers run with winc-and fought with an army of laughing Bacchantes and satyrs.

⁽²⁾ Vol. i. p. 221, Asiatic Researches.

⁽³⁾ This opinion of WILTON'S is quoted in CONDER'S History of India. 1 cannot immediately say in which vol. of the As. Researches it is to be found.

The Dionysiacs of Nonnus have been quoted by Colonel WILFORD, and analysed by Professor Wilson in our Researches-but without hinting at their hero having been grafted on the pantheistic system of India. Nishapur, Déva-Nahushanagar, and other towns, have been pointed out as the site of Nysa, Nicea, or Dionysiopolis, where the extravagant rites of Dionysos' worship were celebrated with the greatest pomp:-where, according to some authorities, he was bornwhere, according to others, he founded a city in honor of a damsel. NICEA, whom he encountered in his expedition through Persia and Bactria: - but all is vague and uncertain on the subject. The Indian origin indeed of the religion of BACCHUS, long ago asserted and believed, has lately come to be suspected from the want of any arguments in its favor but a few slight resemblances of names and ceremonies. Professor A. W. Schlegel expressly denies in his Indian Library, that the Greeks had, previous to the conquests of ALEXANDER, any idea of an expedition of Bacchus to or from India*. The author on whose authority this opinion is repeated, Mr. T. KEIGHTLEY, thus traces the origin of the confusion :-

"When ALEXANDER and his army had penetrated to the modern Cabul, they found ivy and wild vines on the side of Mount Merus and on the banks of the Hydaspes: they also met processions, accompanied by the sound of drums and parti-colored dresses, like those worn in the Bacchic orgies of Greece and Lesser Asia. The flatterers of the conqueror took thence occasion to fable that Dionysius had, like HERCULES and their own great king, marched as a conqueror throughout the east: had planted there the ivy and the vine, had built the city of Nysa, and named the fountain Merus from the circumstance of his birth from the thigh of ZEUS. At length, during the time of the Græco-Bactric kingdom, some Greek writers, on whom it is probable the Brahmans imposed, as they have since done on the Englisht, gave out that DIONYSUS was a native Indian, who having taught the art of wine-making in that country, made a conquering expedition through the world to instruct mankind in the culture of the vine and other useful arts. And thus the culture of the vine came to Greece from a land which does not produce that plant! This last is the absurd hypothesis which we have seen renewed in our own days, and supported by all the efforts of ingenious etvmology!"

Colonel Stacy's group may throw a new light on this curious question. There can be no doubt as to the personage represented by the principal figure—his portly carcass, drunken lassitude, and

^{*} KEIGHTLEY'S Mythology of Greece, 170. + Alluding to Col. WILFORD.

wine-wreathed forehead, stamp the individual: while the drapery of his attendants pronounces them at least to be foreign to India, whatever may be thought of Silenus' own costume, which is certainly highly orthodox and Brahmanical. If the sculptor were a Greek, his taste had been somewhat tainted by the Indian beau ideal of female beauty—inother respects his proportions and attitudes are good—nay, superior to any specimen of pure Hindu sculpture we possess: and considering the object of the group—to support a sacrificial vase (probably of the juice of the grape)—it is excellent. It would be time well bestowed to survey all the temples and antiquities of Mathura, in search for other specimens of Grecian art. Colonel Stacy can have no greater inducement to undertake this pleasing task, than the possession of the highly interesting relic which we have made a faint attempt to introduce to the eye of our readers in the accompanying lithograph.—Ed.

VII.—Description of some Grasses which form part of the Vegetation in the Jheels of the district of Sylhet. By William Griffiths, Esq. Assistant Surgeon, Madras Establishment.

ZIZANIA? CILIATA. Spreng Syst. ii. p. 136; Kunth Agr.p.10.

LEERSIA CILIATA. Roxb. Fl. Ind. p. 207.

PHARUS CILIATUS. Retz. Obs. 5. p. 23.

Gramen in aquosis proveniens, culmis gracilibus basi longe repentibus, articulis cylindraceis pubescentibus, cæterum lævibus.

Folia subglaucescentia, linearia, acuta, supra lineata et tactu scabra, margine subsimplici scabro.

Spicæ paucæ, distantes, subsecundæ, in paniculam nutantem alternatim dispositæ.

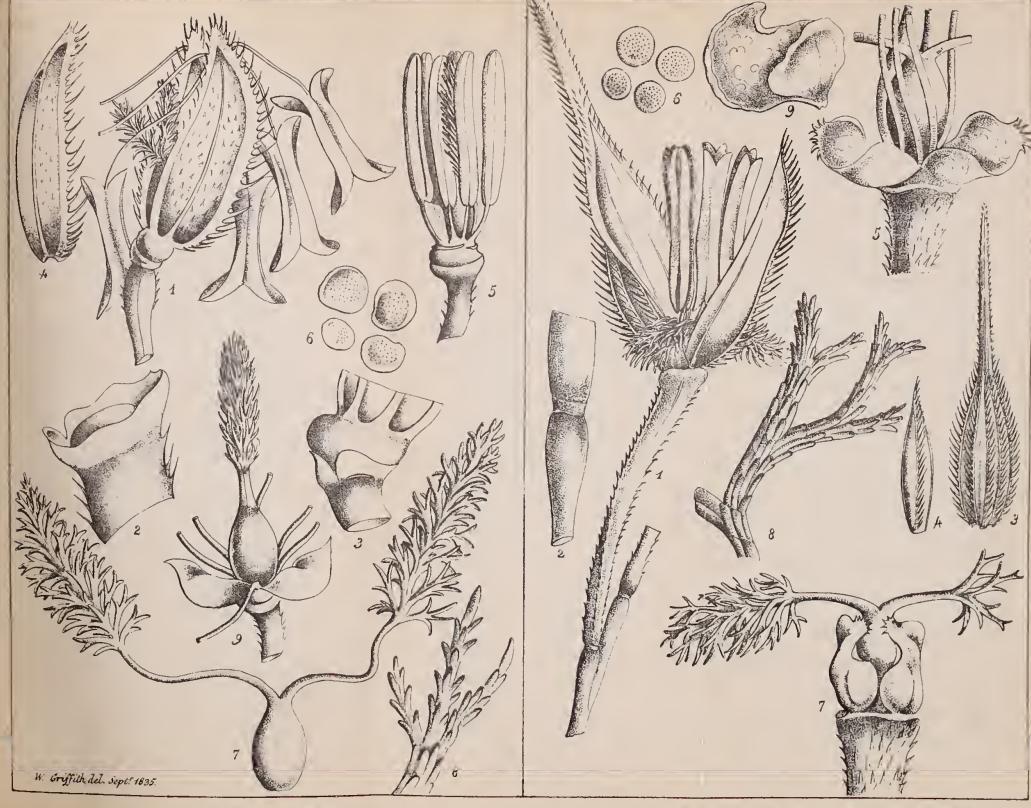
Spiculæ solitariæ, in apice cyathiformi pedicelli curvati articulatæ, subsessiles, uuifloræ.

Glumæ nullæ, nisi cupulam membranaceam apicis pedicelli glumam existimes.

Paleæ 2, chartaceo-coriaceæ, compresso-carinatæ, muticæ, obtuse mucronatæ, brevissime stipitatæ, stipite crasso rotundato; exterior 5-venia, venâ mediâ (carinâ) duabusque marginalibus denticulato-ciliatis, duabus intermediis subglabris, interveniis scabris; interior 3-venia, paullo brevior, carinâ denticulato-ciliatâ, intervenio scabro, cæterum læviuscula.

Lodiculæ 2 carnosæ, acinaciformes, integræ, glabræ.

Stamina 6, antheris longe exsertis.



Zizania ? ciliata.

J.B. Tassin's Lith Press. Colcutta.

Folia in exemplaribus spontaneis semper emersa et erecta*, lanceolata, basi cordata, obtusa, apice sub-cucullata, rigida, suprà tactu scabra.

Panicula erecta, axi ad ejus originem subito angustatâ; rami infimi subverticillati, divaricati, superiores alternantes, ascendentes.

Spiculæ ramis adpressæ, subsecundæ, inferiores geminatæ, inæqualiter pedicellatæ, superiores solitariæ longius pedicellatæ.

Pedicelli clavati, infra medium constricti, ibidemque annulo rubro insigniti, spicularum infimarum curvati.

Paleæ sessiles, apicum pedicellorum continuæ! vix compressæ; exterior major 5-venia, venis denticulato-ciliatis, cæterum parce hirta; arista continua, recta, scabra, paleam excedens; interior mutica, acuminata, 3-venia, carinâ denticulato-scabrâ, venis lateralibus lævibus, pallidis.

Lodiculæ 2, subacinaciformes, magnæ, extrorsum gibbosæ et carnosæ, introrsum sub-membranaceæ, glabræ vel apice ciliatæ.

Stamina 6. Filamenta longe exscrta. Antheræ lineares, longæ.

Ovarium oblongum, glabrum.

Stigmata ratione stylorum longiuscula.

Caryopsis non visa; stipitata?

It is this genus that appears to me allied to *Zizania*. It differs, I conceive, materially from the preceding in habit, in the shape and consistence of the paleæ, which are open during the period of inflorescence, and in the outer one being awned.

Vossia. Wall. et Griff. Mss.

Syst. Linn. Triandria Digynia.

Ordo. Nat. Gramineæ, Jussieu.

Char. Gen.—Spica compressa, articulata, rachi flexuosâ excavatâ. Spiculæ in singulo articulo duæ, alterâ sessili, alterâ pedicellatá, bifloræ. Glumæ 2 dissimiles, exterior chartaceo-cartilaginea, plana, apice in cuspidem producta; interior chartacea, mutica, carinato-navicularis. Flosculi hyalini, mutici; superior (interior) hermaphroditus (in spicula pedicellata sæpius masculus), bivalvis 3-venius. Lodiculæ 2, cuneatæ, dentatæ. Stamina 3. Styli 2. Stigmata plumosa. Caryopsis. Flosculus inferior masculus, bivalvis, bivenius!

Gramen procerum, fluitans, cæspitosum.

Culmi 3—4-stachyi. Folia longissima, acuminatissima, plana, venâ centrali crassâ albâ. Ligula indivisa, dense ciliata. Diximus in memoriam b. Johannis Georgii Vossii, poetæ Germanorum dulcissimi, eru-

* In exemplaribus in horto botanico Calcuttæ cultis natantia, oblongiora et teneriora.



J. D. Berin's Lite Press - Calcutto



ditissimi, poematum græcorum et latinorum, imprimis Georgici Virgiliani translatoris et commentatoris locupletissimi, rerum botanicarum et agrestium insigniter periti.

Vossia procera. Wall. et Griff. Mss.

ISCHEMUM CUSPIDATUM, Roxb. Flor. Ind. ed. Carey, 1. p. 325. Kunth, Agr. 1. p. 516.

Hab. In inundatis vernacule *Jheels* dictis prope Hubbeganje, fluminis *Barak*, Bengalæ orientalis. Florentem invenimus mense Septembris, 1835.

Gramen glaucescens, in aquis stagnantibus leniter fluentibus profundis nascens. Culmi immersi longissimi, crassi, cellulosi, radiculas capillaceas ad geniculas emittentes, emersi 3—4-pedales, vaginis laxis, compressiusculis, tactu scabris undique tecti. Vaginarum axillæ gemmiferæ; colla dense barbata. Ligula brevis truncata.

Folia lineari, ensiformia, basi subcordata, longissime subulato-acuminata, 2, $2\frac{1}{2}$ pedalia, supra parce pubescentia, infra glabra, venâ centrali crassâ, albâ, supra planâ, subtus prominulâ, marginibus cartilagineis antrorsum denticulatis.

Spicæ terminales, binæ vel ternæ, rarius quaternæ, digitatæ, 6—8unciales, patentes, subnutantes, laterales subsessiles, rudimento alterius
interdum adjecto, terminalis pedunculata, insertionibus cartilagineis
plus minus hispidis. Rachis introrsum planiuscula, extrorsum convexa; flexuris dextrorsis sinistrorsisque, marginibus scabris. Spiculæ
pedicellatæ, infimæ summæque tabescentes. Pedicelli spicularum inferiorum articulis paullo longiores. Gluma exterior dorso plana, venosostriata, apice producta in cuspidem ensiformem, longam, glumam
ipsam fere bis superantem, rectam, vel subundalatam, venoso-striatam,
marginibus denticulato-scabris.

Interior navicularis, carinâ obliquâ a medio suprâ scabra, breviter mucronata, irregulariter venosa, venâ centrali nunc incompletâ, intermediis incompletis et sæpius, præsertim spiculæ sessilis, cum vena centrali arcuatim confluentibus.

Paleæ flosculi exterioris masculi membranaceæ, complanatæ, biveniæ! exterior apiculo brevi pubescente: marginibus mutuo involutis subciliatis.

Lodiculæ 2, carnosæ, maximæ, cuneatæ, angustiores quam in flosculo hermaphrodito, dentatæ. Antheræ longe exsertæ, lineares, luteæ. Pollen globosum, inæquale, læve. Rudimentum fæminei nullum.

Paleæ flosculi interioris hermaphroditi consimiles, sed exterior trivenia. Lodiculæ staminaque ut in mare. Ovarium subobovatum, glabrum. Styli duo, umbone nullo interjecto.

Stigmata ratione stylorum longa, ramis denticulatis. Caryopsis... Spiculæ stipitatæ flosculi minores, et superior interior rarius hermaphroditus.

Obs. Genus habitu quodammodo Tripsaci, Hemarthriæ accedens, sed discrepans præcipue pedicellis flosculorum exteriorum glumisque interioribus spicularum sessilium solutis, nec axi adnatis, flosculisque exterioribus bipaleaceis masculis, nec unipaleaceis neutris. Ab Ischæmo differt præcipue paleâ exteriore flosculi hermaphroditi (superioris) muticâ.

PANICUM BRUNONIANUM. Wall. et Griff. Mss.

Paniculâ effusâ, spiculis 1 vel 2 infimis sessilibus et in axis excavationibus seminidulantibus, reliquis exsertis sæpissime solitariis, rachillâ in aristam spiculam duplo superantem productâ, foliis linearibus 3-veniis vaginisque glabris, ligulis 3-dentatis.

Hab. In aquis leniter currentibus profundis plagarum Bheels dictarum prope Goulnagar; florens Septembre.

Gramen fluitans: culmi longissimi, compressiusculi, ad geniculos radicantes. Vaginarum colla nuda. Ligulæ dens intermedius minor. Folia linearia, 2-3-uncialia, obtusiuscula, 3-venia, marginibus subsimplicibus denticulatis. Panicula terminalis, ambitu ovata, subglabra, axi inferne tetragonâ et excavatâ. Spiculæ l vel 2 infimæ in excavationibus seminidulantes; reliquæ exsertæ sæpissime solitariæ; rachilla scabra ultra spiculam quamque si unica, ultra terminalem si geminata, in aristam subulatam, antrorsum denticulatam producta. Gluma exterior minima. membranacea, evenia, subcrenulata, decolorata; interior lanceolata, acuta, mutica, venosa (sub-13-venia,) marginibus parum involutis subciliatis. Flosculi dissimiles; exterior masculus, duplo triplove major: palea exterior glumæ interiori similis, sed scabrella et margines magis involuti; interior duplo minor breviorque, membranacea, glabra, apice bifida, dente setiformi minimo interdum interjecto, venis 2 indistinctis infra apicem evanidis. Lodiculæ 2, paleæ interiori omnino externæ, oblongæ, subrhomboideæ, integræ. Stamina 3, antheris rubro-sanguineis. Paleæ floris interioris fæminei membranaceæ, muticæ, ovato-lanceolatæ, exterior evenia! interior latior, magis obtusa et involuta, incomplete bivenia. Staminum rudimenta tria. Lodiculæ 2 angustæ, interdum coalitæ? Styli 2, imâ basi coaliti, longi; stigmata plumosa, purpurascentia, ratione stylorum longissima. Carvopsis non visa.

This species belongs to the last section of this extensive genus, as given in Mr. Brown's Prodromus; it is interesting, as it seems to be the only species of the section hitherto found out of New Holland.

In the disposition of the sexes it agrees with Isachne, but differs from it in habit, in the relative size of its glumes, and in the consistence of its paleæ. From Chamæraphis this section differs only, we are told by Mr. Brown, in the number of its styles. The curious prolongation of the rachilla beyond the terminal spicula likewise occurs in some genuine Panica.

REFERENCES.

Plate XXIII. Vossia procera. Figs. 1, 2. Portions of a spike viewed on different faces. 3, Spicula detached. 4, Exterior glume viewed on its inner face. 5, Outer palea of the inner hermaphrodite flower three-veined (by a fault in the transfer the central vein in the original drawing has been left out.) 6, Inner palea of ditto two-veined. 7, Outer palea of exterior male flower, two-veined. 8, Inner ditto, two-veined. 9, Inner glume, viewed laterally and on its inner face. 10, Pollen. 11, Ovarium, or rather Pistillum, with the two lodiculæ and the three filaments in situ. 12, Outer view of lodicula. 13, Inner view of ditto, the lateral stamina separate with these, 14, Portion of a branch of the stigma.

Plate XXIV. Left half. Zizania? ciliaris. Fig. 1, Spicula. 2, Apex of pedicel, much enlarged. 3, Ditto with lower portion of the outer palea. 4, Lateral view of inner palea. 5, Lateral view of lodiculæ, stamina and pistillum; paleæ removed. 6, Pollen. 7, Pistillum. 8, Portion of a branch of the stigma. 9, Genitalia, relative situation, from a young spicula; anthers removed, and the lodiculæ displaced.

The same plate, right half. Potamochloa Retzii. Fig. 1, Spicula with its pedicel, that of the second pedicel removed at the time of expansion. 2, Portion of the pedicel, shewing the construction. 3, Outer palea, dorsal face. 4, Inner ditto ditto. 5, Ovarium, stamina and lodiculæ, the two former in situ, the latter displaced. 6, Pollen. 7, Ovarium, styles and stigmata with the lodiculæ in situ. 8, One of the divisions of the stigma. 9, Lodicula, inner face.

VIII.—Notes on Delhi Point, Pulo-Tinghie, &c. and on some Pelagic Fossil remains, found in the rocks of Pulo-Ledah. By Wm. Bland, Esq. Surgeon H. M. S. Wolf.

[Accompanying specimens presented to the As. Soc. 4th July, and deposited in the Museum, next to those presented by Dr. WARD from Penang and Queda.]

Where the Malay peninsula terminates in the China sea, there is a tongue of land, called by the natives *Delhi Point*, somewhere about 104 E. longitude, for it is not very correctly laid down. Reefs are found here, running to the southward and eastward, upwards of a mile at low water. Along shore, for the space of two or three miles, is strewed with large masses of *scoriæ* many feet thick, hard, and emitting a metallic sound. Specimens Nos. 1 and 4 will show the kind of vesicular masses mentioned; long lines of perpendicular strata are found stretching generally parallel to the shore, from three to

eighteen inches in thickness, of which No. 6 is a specimen. Indurated clayslate, No. 9, is likewise seen in lavers running parallel, and in juxta-position to Nos. 1 and 2, of a few inches in breadth. Quartz was found, No. 5, in layers from one to two inches in thickness, accompanying the others and occasionally crossing them, and again continuing its course: imbedded masses of siliceous matter occurred both in the scoriæ and in the strata. A nucleus, five or six feet in diameter, was examined, which presented the appearance as if lava in a liquid form had been forced up from below, with a gyrating motion; circular layers having different shades of colour becoming wider and more extended, and were found edging away into straight lines parallel to the other strata. Of the tube marked No. 2, many were found from half an inch to two inches diameter; whilst No. 3 was got at the outer edge of the stratification. Of the remarkable specimen No. 10, abundance were seen, always standing up an edge: above the general level, and occasionally many feet in length, a piece might be found large enough to furnish forth the reticulations of a good-sized Gothic window.

At the N.E. point of the reef, within a few yards of the sandy beach, and dry at low water, was found a fossil tree, of which No. 11 is a specimen, standing at least 15 feet high and of considerable diameter, attached to a mass of rock of the same kind, and so good was the resemblance to a decayed tree, that some of the seamen called out, 'Come and see a tree grilled into stone by the heat.' The fossil in question must have been in a decayed state previous to its exposure to the mineralizing process, and it is the more remarkable, as it now stands, to all appearance, as it originally stood when alive :it is the same as No. 9, composed of argillaceous schist. A specimen of coral No. 7, which has been exposed to the same general igneous agency as the masses scattered around, and found in the masses themselves, Madrepore No. 8, but the whole of the reef has coral of recent growth scattered over it, in all states and ages. Our stay on this point only extended to a few hours: little opportunity was given for minute observation, but it is a field well worthy the attention of future travellers in that quarter.

Pulo-Tinghie will be found in the charts to the northward and eastward of Delhi Point: this island rises to a considerable altitude, and terminates in a graceful truncated cone, with a lower cone seen to the southward of the former. The general surface presents irregular ridges radiating from the cone as a centre, running down to the circumference, i. e. the water's edge, which disposition of surface often obtains in volcanic islands. Be this, however, as it may; we found Pulo-

Tinghie densely covered with jungle, most difficult to penetrate, without more time than our public duties permitted; hence the specimens are not numerous, and were found along shore, generally from masses lying about. No stratum was seen. The island terminates to the eastward in a high reddish coloured cliff, but at which we had no opportunity of landing.

Nine specimens marked Pigeon island, from a moderately high and cliffy islet some miles to the southward of *Pulo-Tinghie*, obtaining its name from the abundance of a fine cream-coloured pigeon, having the wings and tail tipped with black; the same bird which is found on the small islands on the *Tenasserim* coast. No. 25, from a large mass partly beneath the surface of the sea. 21, high cliffs around, as well as No. 22.

Returning from the eastward, we had an opportunity of examining a group of small islands called *Pulo-Romania*. These islets, about two miles to the southward of *Point Romania* on the Malay peninsula, are partially covered with wood, and appear to be formed chiefly of granite of two kinds, which was seen checquered by fissures in all directions, and intersected by Nos. 34 and 35, found standing above the general level in narrow ridges, the granite being more easily disintegrated than the intersections themselves. No. 31 found in layers of various thickness, and No. 29 in large irregular masses some 15 feet in length, on shore or partly immersed in the sea.

Enclosed are thirty specimens, from a remarkable group of islands, lying between Jan Salang, (Junk Ceylon) and Pulo-Pinang, parallel to the kingdom of Quédah and in sight of the mainland. Passing over many islands visited, all of which will be found worthy the attention of the geologist, and the ornithologist, as well as the conchologist, I shall only mention Pulo-Ledah, as one of considerable importance, from the circumstance of pelagic fossil remains being found in the rocks.

Pulo-Ledah dedarat, literally in the Malay language, 'Tongue island in shore,' to distinguish this from another Pulo-Ledah de laut, or 'Tongue island at sea.' This island is about a mile and a half in circumference, and rises to the height of 4 or 500 feet, crowned by a castellated looking rock with perpendicular strata: the whole appears composed of limestone, having a considerable proportion of siliceous matter deposited in it, with veins of quartz a few inches in breadth occasionally intersecting it. The general rock was found stratified from one to three or four feet in thickness, lying at an angle about 45° dipping to the eastward; all the surface, wherever exposed, is rough and uneven, of which Nos. 15 and 24 are specimens. Numerous caverns were found whose roofs not being so exposed were more smooth.

which caves have been evidently formed by the action of the waves impinging against the rocks; which action is still going on in certain situations. Some caverns were situated higher up, and not now exposed to the same agency, but it was noticed in a few of them that the entrances were smooth, similar to those in various parts of the world, which have been used, and smoothed down by the ingress and egress of wild animals: it turned out, however, in this case, that the agent that had worn these entrances was man himself, for these caves furnish him with troglodytic abodes during the season for collecting the nests of the Hirundo osculenta.

Your attention may be more particularly called to the north side of Pulo-Ledah, where will be found large masses of the same rock, from 20 to 30 feet in length and breadth, and 10 feet in thickness, lying in juxta-position, and no doubt originally deposited en masse, but having been raised unequally, have been broken into their present form and appearance. These masses were found rich in fossil remains; quantities of testaceous deposits were seen in all directions, partly above the general surface, undergoing disintegration along with the matrix in which they were imbedded. Of the fossil nautilus, No. 16. many were seen, as well as some others, concerning which some doubt may remain whether or not they are ammonites. As to the nautilus no doubt can exist, for the plain concave septæ dividing the chambers of the shell are well marked, with the siphuncle in the middle. Had time and better tools permitted, better specimens would have been procured; but the matrix was found very indurated, and it requires time to take such specimens out of hard stone, in a perfect state. The labourer, always worthy of his hire, would here be richly repaid for his time and trouble.

I add the rough sketch of a shell as it was found lying in the matrix, and of the natural size, which gives a tolerable idea of its general appearance. Siliceous cylinders No. 22, occur frequently, and a back bone was found in a fossilized state: from the round cuplike appearance of the vertebræ, it is most probably that of a fish.

Pulo-Ledah is one of the Lancavies, as well as Pulo-Trotto, (Giant's island,) an island, high, mountainous, and worthy of being better known; and Pulo-Tloer (Egg island) is a small one; but the whole of the islands in question will be found interesting, as on this subject of fossil remains many of your correspondents in India are devoting their time and attention with great success. I am sorry our time among the islands mentioned was so limited, but it is enough that I have pointed them out as a field worthy of future research, as well as the main land opposite.

IX.—Fossil Remains of the smaller Carnivora from the Sub-Himálayas. By Lieut. W. E. Baker and Lieut. H. M. Durand, Engineers.

The specimens which are the subject of the following note form a part of the Dadúpúr Collection, and comprise varieties of the genera, Felis, Canis, and Gulo.

The comparison of such, with their existing representatives, must necessarily be less satisfactory than that of the large Pachydermatous genera, which being local in their habitats either contain few species, as the Elephant, Hippopotamus, and Tapir, or when, as in the Rhinoceros, the varieties are more numerous, the size of the animals, and the striking peculiarities of their osteology have claimed for them a minute description and comparison from Cuvier. On the other hand, the smaller carnivorous tribes have a far wider distribution, and their species are as numerous and as varied as the climates under which they are found; their distinctions are chiefly drawn from the external characters of the animals. Minute differences in their osteology, if they exist at all, escape the attention of the naturalists who describe them, and would, in fact, possess little interest except for the fossilist.

We should not be warranted in pronouncing any particular fossil to belong to an extinct species, without having previously compared it with all the known varieties of its genus; and even were such extensive means of comparison in our power, its result could not be decisive*, so long as there remained unexplored regions, whence new varieties might be derived. We shall, therefore, content ourselves with negative conclusions drawn from comparison of our fossils, with the skulls of those species only of their existing congeners now inhabiting the neighbouring districts, none other being at our command. Such conclusions, we hope, will not be without geological interest; as, if we succeed in establishing one or two points of marked difference, they will be sufficient proof that the animals now inhabiting these provinces are not the lineal descendants of those whose remains are entombed in the strata of their soil, and thence may be inferred the occurrence of some great geological change during the lapse of ages, which have intervened between the periods of their several existence.

FELIS.

Of this genus there are traces of several varieties among our fossils, but as the larger ones, with the Hyena and Canis, may form the subject

4 F 2

^{*} For instance, in the 52nd No. of the Journal As. Soc. Mr. Hodgson describes two new species of gulo and one of felis.

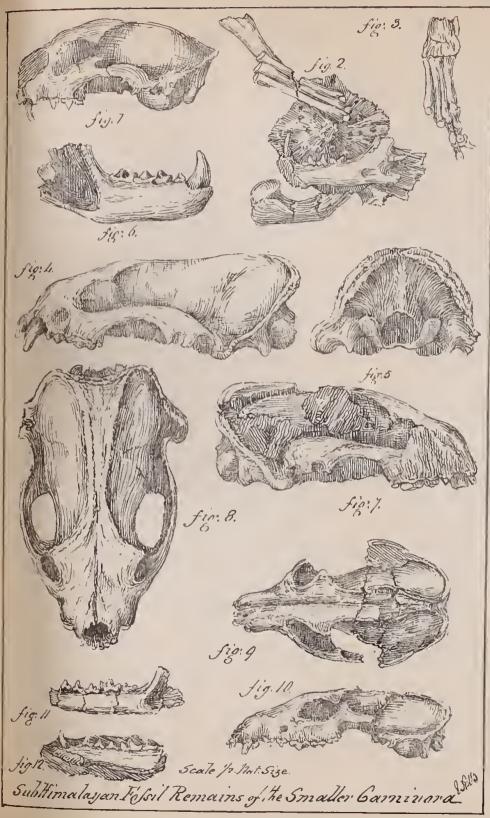
of a future paper, we will confine our present notice to the Cat. The cranium represented in fig. 1, Pl. XXVII. though somewhat mutilated, is sufficiently perfect for comparison. The most serious injury which it has sustained (as being the only one affecting the measurements) is a slight crush or compression, which has apparently flattened, and perhaps widened the cranium. The proportions between the fossil and the skull of a common-sized wild or jungle cat are as follows:—the length from posterior of occipital condyle to anterior of canine tooth being taken as the unit or modulus, and those dimensions only being collated, in which the greatest differences exist. The two skulls may be understood to correspond in other respects.

	Recent.	Fossil.
Longth from post of occipital condyle to ant. of canine tooth, assumed at	1,000	1,000
Greatest breadth of cranium opposite mastoid processes, Height of occiput from lower margin of foramen magnum	,509	,581
to top of transverse ridge,	,301 ,267	,333 ,346
Ditto measured externally across most prominent part of line of molars,	,427	,489
orbit's margin,	,289	,257

The differences of proportion exhibited by the foregoing comparison are, as will be seen, very trivial. Setting aside the excess in breadth of the fossil's cranium, which if not caused is at least exaggerated by the crush before alluded to, there will remain no remarkable points of difference except in the diameter of the orbit, and in the width across the occipital condyles. The other variations probably exceed not what may be detected in the skulls of cats belonging to one species. There are, however, other differences of form not shewn by the measurements. In the fossil, the post. orbitary apophysis is more developed, and the plane of its projection more continuous with that of the frontal bone. The depression of the cranium in rear of this apophysis is more marked, giving a greater width to the temporal fossæ:the bullæ of the mastoid processes have a more elongated shape, and are generally larger; and the transverse ridge of the occipital bone is higher, sharper, and more prominent. All, or nearly all, these differences, tend to show a greater development of the predacious facultics in the fossil,—a circumstance further confirmed by the teeth, which, though precisely corresponding in form with those of the cat, are somewhat larger and stronger.

The lower jaw occupying the central place in fig. 2, must have

Vot. V. Pl. XXVII.





belonged to a smaller animal than that which owned the cranium: it presents no difference worthy of note, from the lower jaw of the wild cat. The humerus, tibia, and metatarsal bones, forming part of this interesting little group, appear to have belonged to the same individual as the lower jaw, and it is curious enough that their present bond of connection is the plate of a small crocodile. The carpal, metacarpal and phalangal bones represented in fig. 3, obtained from the same locality, though at different times, may possibly be assigned to the same or a similar animal.

Gulo.

Of this genus we possess the fossil skulls of two individuals, one of which, represented in fig. 4, is nearly perfect: the lower jaws have been separated at their symphysis and otherwise somewhat mutilated, but as they were not found attached to the cranium, we may consider ourselves fortunate in having obtained them at all. The second cranium, fig. 7, has suffered considerable mutilation, and is without the lower jaws: we have, however, inserted it in the plate, because though otherwise less perfect, it has escaped a crush, which appears to have flattened fig. 4. Some differences of proportion between the two fossils would be accounted for under this supposition.

The recent skulls with which we have compared the above mentioned fossils belong to an animal known by the Hindustani name Biju $\Leftrightarrow ::$ identical, or nearly so, with the Cape Ratel, (Gulo Capensis, Desm.)

In classing the Biju and Ratel under genus Gulo, we follow the common system of arrangement; though, as remarked by Cuvier*, both the number and character of their teeth would rather place them with the Mustela Putorius. They appear, in fact, to be indebted to their plantigrade motion alone for a place among the Gluttons. The fossils now under consideration correspond in dentition with the Ratel and Biju, and the following table will shew that their resemblance to the latter in most other respects is very strong.

* Il convient d'autant mieux de comparer le Ratel au Glouton, que ces deux quadrupèdes sont à peu près de même taille; mais outre que le Glouton a six molaires de plus que le Ratel, le crâne de celui-çi est plus large en arrière, son front moins élevé, son orbite moins cerné, ses arcades zygomatiques moins hautes, et l'apophyse coronoïde de sa machoire infèrieure beaucoup moins haute, plus large, et plus obtuse. Les rapports du Ratel avec le putois, d'apres ses dents et sa tête, sont certainement plus importans que les différences de marche. Ossemens fossiles.—Tom. IV. Chap. VI.

	Recent Biju.	Fig. 4.—Fig. 7.		
	Dija.			
Extreme length from posterior of occipital condyles to an-				
terior of incisors, taken as the modulus, and assumed at		1,000	1,000	
Breadth measured across mastoid processes,	0,581	0,592	0,610	
Greatest breadth of cranium opposite mastoid processes,	0,467	0,443	0,474	
Least ditto ditto at temporal fossæ,	0,226	0,258	0,262	
Height of occiput from inf. margin of foramen magnum				
to sup. of occipital ridge,	0,318	0,307	0,343	
Breadth of ditto from point to point of styloid processes,	0,335	0,361	0,394	
Ditto across the occipital condyles,	0,243	0,241	0,248	
Ditto of frontal from point to point of post. orbitary apo-				
physes,	0,286	0,327	0,313	
Ditto greatest across zygomatic arches,	0,546	0,543	0,561	
Ditto exteriorly across the superior canine tecth,	0,220	0,238	0,236	
Perpendicular diameter of occipital foramen,	0,088	0,091	0,108	
Length from anterior of canine teeth to post. of tubercu-	Í			
lous teeth, measured externally,	0,282	0,287	0,287	
Breadth of upper jaw measured across carnivorous molars,	0,347	0,339	0,325	
Greatest antero-posterior diameter of canine teeth,	0,058	0,071	0,067	
Width of tuberculous molars,	0,081	0,073	0,069	

The two fossils, though differing considerably from each other, agree in the following points of dissimilarity from the recent skull. Their canine teeth are larger and stronger, and their tuberculous molars smaller; the two lines of molars converge towards the muzzle considerably less in the fossil than in the recent, and the individual false molars are set less obliquely to the line of maxillary. The frontal is wider between the orbits; the post. orbitary apophyses more prominent, and the depression of the cranium in rear of them less deep; the exterior portion of the mastoid processes has a far greater development (fig. 8); the transverse occipital ridge is thicker, more rugged and more prominent, and projects considerably beyond the plane of the occiput in the prolongation of that of the parietal bones (fig. 5). Measurements of the recent and fossil lower jaws exhibit no differences save in the canine teeth, which severally correspond with the same teeth in the upper jaw. There is, however, in the fossil (fig. 6) a deep depression in the ramus, which in the recent species is nearly flat. In our specimen this depression is as marked as in the tiger and other feline animals. The differences above noted, as before remarked with regard to the cat, tend to prove that the ancient species was even more powerful and savage than its present representative, the Biju itself, by no means deficient in these qualities. The three recent skulls examined on this occasion had all suffered more or less from the violence to which the vigorous self-defence of the animals had obliged their captors to resort.

CANIS VULPES.

The specimen represented in figs. 9 and 10, though fortunate in possessing both lines of molars complete, has suffered much from a

crush by which the whole posterior portion of the head has been flattened and disfigured. The dimensions selected for comparison in the following table are those least likely to be affected by the accident. Our recent specimen belongs to an adult male fox, of a species common in the N. W. provinces of India. Its size, the colour of its fur, and other external characters, appear to correspond with the description of C. Corsac (Pallas), which Cuvier is inclined to identify with C. Bengalensis of Pennant—figured also in "Hardwicke's Illustrations," Pl. II. Parts XV. and XVI.

	Recent.	Fossil.
Length from occipital condyle to anterior of canine, taken		
as modulus, and assumed at	1,000	1,000
Breadth measured across mastoid processes,	,390	,433
Least hreadth of cranium at the temporal fossæ,	,205	,206
Breadth from point to point of styloid processes,	,253	,298
Ditto across occipital condyles,	,202	,251
Ditto of frontal from point to point of post. orhitary		
apophyses,	,287	,295
Greatest breadth measured externally across both lines of		1
molars,	,338	,319
Horizontal diameter of occipital foramen,	,130	,133
Length occupied by line of molars and canine taken toge-		
ther,	,500	,470
Ditto ditto molars alone,!	,410	,415

The chief differences here exhibited are those of greater breadth in the posterior portion of the fossil's head, and must, though they appear natural, be liable to the suspicion of having been caused more or less by the crush before alluded to; but there are some points of dissimilarity which must be considered free from this objection. The transverse occipital ridge is thicker and higher in the fossil; the post. orbitary apophyses are altogether broader and more prominent; the hollow or depression in their upper surface, forming a valley between the outer edge of the apophysis and the swell of the frontal, (constituting one of the distinctions between the fox and the other varieties of canis) is in the fossil more marked. From the rear of these apophyses start two ridges, which at first converge towards the occiput in a curvilinear direction, until the distance between them is reduced to about half an inch, after which they run nearly parallel for some distance, and then converge again, till they unite near the occiput and become blended with the parietal crest. We have been particular in describing this formation, as a very similar one was observed by CUVIER in the skull of the "Renard Tricolor," C. cinereo-argenteus, Linn. It will be observed from the table of measurements, that the length occupied by the molars and canine teeth together is less in the fossil, while that occupied by the molars alone is proportionally greater. This difference is only apparent, and is caused by the advanced position of the first false molar close to the root of the canine; the tooth is probably a deciduous one, not yet replaced by the permanent molar; the unworn state of the other teeth also attesting the youth of the fossil, at the period of its demise. The lower jaws, figs. 11 and 12, are not sufficiently perfect to afford any satisfactory measurements. Fig. 11 is the external view of the left; and fig. 12 the internal of the right lower jaw.

To the foregoing observations we have nothing further to add than that, in our opinion, they point out sufficient proof of specific differences between the several objects compared; but, for the reasons before adduced, we must limit our conclusions to this, and cannot therefore venture upon giving new names to our fossil species.

Measurement of Fossil Skulls, &c. represented in Plate XXVIII. figs. 1 to 10.

Detail of Measurement.	Felis	Felis	Gulo figs.4 5 & 8.	Gulo	C.Vul- pes 9 & 10.
	ins.	ins.	ins.	ins.	inches.
Extreme length from post, of occipital coodyles to			}		
anterior of incisor teeth,	3,50		5,51	5,09	4,09
Ditto ditto ditto canine ditto,	3,27		5,13	4,86	3,83
Breadth measured across mastoid processes,	1,67		3,26	3,10	1,66
Greatest breadth of cranium opposite mastoid pro-					
cesses,	1,90		2,44	2,41	1,71
Least ditto ditto at temporal fossæ,	1,28		1,42	1,33	0,79
foramen to top of transverse ridge,	1,09		1,69	1,74	0,90
Breadth from point to point of styloid processes,	1,09		1,99	2,00	
Ditto across the occipital condyles,	1,13		1,33	1,26	
Ditto of frontal from point to point of post, orbitary	1,70	1	1,00	1,20	0,50
apophyses,	1,80		1,80	1,59	1,13
Greatest breadth across zygomatic arches,	2,72		2,99		
Breadth measured externally across superior canine					
teeth,	1,00		1,31		
Ditto ditto most promioent points of line of molars,	1,60		1,87	1,65	1,22
Perpendicular diameter of occipital foramen,	0,45		0,50		
Horizontal ditto ditto,	0,55		0,62	0,60	0,51
Length from exterior of incisors to anterior of pa-	1		0 40	0.00	
latal sinns,	1,52	• •	2,40	2,00	• •
gin of occipital foramen,	1,68		2,56	2,70	2,05
Ditto occupied by molars and canine teeth, taken	1,00	• •	2,00	2,10	2,00
together,	1,24		1,58	1,46	1,80
Ditto ditto molars alone,	0,95		1,25	1,17	1,59
Diameter of orbit perpendicular, but measured in					-,00
plane of orbit's ma gin	0,81		0,62		0,58
Ditto ditto from point of post. orbitary apophysis to					
ant margin of orbit		• •	0,79		0,74
Greatest antero-posterior diameter of canine tooth,	0,19	-	0,39	0,34	0,18
Width of tuberculous tooth, (in Felis and Gulo,)	0,14	• •	0,40	0,35	* *
Lower JawLength from posterior of condyle to		2,13	3,20		
a oterior of canine,		0,98			••
Ditto occupied by molars and caoine teeth, taken	1	0,50	1,13		• •
together,		1,19	1,74		
Ditto ditto molars alone		0.78	1,37		
Depth of lower jaw taken in front of carnivorous					
tooth.		0,44	,		0,45
Greatest antero-posterior diameter of canine tooth,		0,20	0,38		0,13
, and the same of			-		

X.—Continuation of a Paper (Journal, May, 1835), on the Heights of the Barometer as affected by the Position of the Moon. By the Rev. R. Everest.

In a comparison of the heights of the Barometer with the position of the moon in declination, (See Journal, May, 1835,) I stated that it appeared, that though the greatest depressions coincided, or nearly so, with the times of the moon's maximum declination, yet that many of the greatest elevations held a 'similar situation. To ascertain whether this idea was well-founded, the daily barometric heights were taken from the 4 P. M. column of the Meteorological Registers of the Journal; then the differences either in excess or defect from the monthly mean, were noted and placed in different columns according to the state of the moon in declination, as given in the Nautical Almanacks for noon of the same day. Then the average of each column was taken for the year, and continuing the process for the 13 years of which the Meteorological Registers are extant, a general average was finally taken of the whole, which came out as follows: 25° 20° 15° 10° Moon's Decl.

If it be objected that this difference, between the two extremes of the line, of '008, be small, we may answer that small as it is, it is nearly ith of the whole amount. The heights of the barometer at London for a period of 24 years were then examined in a similar manner, only that instead of classing the differences in columns according to the number of degrees of the moon's declination on the same day, they were classed according to the distance of the day on which the observation was taken, from the day of maximum declination. Thus, the number of days from maximum north to maximum south declination being nearly 14, the differences were arranged in 14 columns, numbered in this way:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 and as a whole revolution from one time of maximum declination to its succeeding one is something less than 28 days, a column was occasionally left blank to keep the maxima always in the 1st and 14th. This method is rather less troublesome than the former one adopted, but it does not answer so well for a long series of years, as the moon's maximum declination is very different in different years:—for example, in 1820, it was between 28° and 29°, and in 1829, between 18° and 19°. The average, therefore, was taken for the six years in which the declination was greatest, viz. 1818, 1819, 1820, 1821, 1822, 1823. The maximum declination was then always above 25°.

so that the first column would correspond with the left-hand column of the former classification. North and south declination were then put together, and the results came out thus:

The average was next taken for nine years, in which the declination was at a medium, say between 26° and 21°, so that the first column would nearly correspond with the second column of the former classification; the seventh column being, as before, that on which the declination was least. The years were 1814, 1815, 1816, 1817, 1824, 1825, 1826, 1833, 1834, and the results were:

The average was again taken for nine years, in which the declination was least, viz. between 21° and 18°; that is to say, 1810, 1811, 1812, 1813, 1828, 1829, 1830, 1831, 1832. The first column, in this case, would nearly correspond with the third in the classification of the Calcutta barometer. The results were as follows:

In this last case no increase of variation is perceptible towards the maximum, but then the maximum did not usually exceed 20°, or at the most 21°.

I have as yet said nothing about the perigee, because it has been proved in Europe that the perigee produces some effect on the weather. With a view to ascertain whether the effect produced was the same as that occasioned by the increase of declination, I took the same variations of the London barometer, as before, for 24 years, and arranged them in different columns according to the state of the moon's semi-diameter on the days on which they were taken. The general average came out thus:

) 's ½ diam. 1000" 990" 980" 970" 960" 950" 940" 930" 920" 910" 900" 890" Av. Var. Bar. 247 227 220 229 226 219 216 214 209 224 205 218 211

Here there appears a tendency to an increase of variation with an increase of semi-diameter; but on examining the differences of the Calcutta barometer, no such increase could be made apparent. It remains, therefore, in doubt whether, in this climate, such an increase does exist—or whether, owing to some mistake, yet undetected, it has not been made apparent. I am inclined to the latter supposition—from this consideration—1st, If no increase exists, no results could be traced from it; 2ndly, If an increase exists, though not, at

present, apparent, some remote results would probably be observed, which might be ascribed to it, as their cause.

Thus, with an increase in the variation of the heights of the barometer, an increase both of dryness and moisture would follow. As an increase of variation also attends an increase in declination, it is probable that the greatest effect would be perceived when the two causes were in co-operation together. Now as there are certain years in which the moon's perigee fell on the same day with her maximum declination, either north or south, it is probable that, in those years, the extremes of weather, both of dryness and moisture, would be experienced. Is this then the case? Are those years in which the day of perigee is the same as the day of maximum declination, also those in which the extremes both of drought and moisture occur! By such results let these speculations be tried. For our present purpose, which is only to obtain some useful indications, the difference between an absolute error and a barren verity is not worth mentioning.

XI.—Proceedings of the Asiatic Society.

Wednesday Evening, the 5th October, 1836.

The Rev. Dr. MILL, Vice-President, in the chair.

Lieutenants Newbold and S. Tickell, proposed at the last meeting,

were balloted for, and duly elected Members of the Society.

Mr. Vincent Tregear, proposed at the last meeting, was, upon the favourable report of the Committee of Papers, unanimously elected an honorary member.

Mr. G. F. MacClintock was proposed by Mr. Macnaghten, seconded by Dr. Mill.

The Secretary then read the Report of the Committee of Papers on Mr. C. BrownLow's proposition relative to the publication of the Alif Leila.

[See below.]

Resolved—That the Society approve and adopt the Report of the Committee:—that it feels honored by Mr. BrownLow's desire to publish the work under its auspices; and that in addition to its own subscription, the prospectus shall be circulated among individual members, and the patronage of the Government shall be respectfully solicited to Mr. BrownLow's undertaking.

Library.

The following books were presented:-

A Discourse concerning the influence of America on the mind, being the Annual Oration delivered before the American Philosophical Society on the 18th October, 1823, by C. J. INGERSOLL, Esq.—by the Society.

Notice Historique sur Charles Telfair, Esq. Fondateur et President de

Notice Historique sur Charles Telfair, Esq. Fondateur et Président de la Societé d'Histoire Naturelle de l'île Maurice, &c. &c.; by M. Julien Des Jardins—by the Author.

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Nouveaux Choix des Poesies Originales des Troubadours; by M. RAYNOUARD—by the Author.

Opinions on various subjects, dedicated to the Industrious Producers; by WM. MACBERE, Esq. - by the Author.

The Indian Journal of Medical and Physical Science—by F. Corbyn, Esq.

Editor.
GAY'S Fables translated into Bengali Poetry, by Mahárája KALI KISSEN Behadur—by the Translator.

Conclusion of the Guldestah, or Nosegay of Pleasure, by Múnshí Mannu'

LA'L-by the Author.

Map of the Indus River and of the neighbouring countries, from the recent surveys, compiled in the Surveyor General's Office—by Mr. Tassin.

Royle's Himalayan Botany, 9th part-from the booksellers.

Read a letter from the treasurer of the Academy at Bordeaux. Mr. Dutrouilles, forwarding by the hands of Dr. Lavergne a packet of seeds for the Botanic Garden of Calcutta, and requesting in return such seeds from Tibet or other colder parts of India as are likely to thrive in France.

The seeds have been made over to Dr. Wallich, who will kindly reply on the subject to Bordeaux.

Literary and Antiquarian.

An account of some of the Petty States lying north of the Tenasserim Provinces, drawn up from the journals and reports of Dr. RICHARDSON, was submitted by Mr. E. A. Blundell, Commissioner of these new provinces; also a sketch of the history of Labong, by the same.

Capt. A. Cunningham, Engineers, A. D. C., presented to the Society the very extensive collection of statues and other specimens of Bauddha sculpture discovered by him in his exploration of the well known monument or tope in the road between Ghazipur and Benares. The following note on these interesting relics was read.

"The stone figures, bas-reliefs, and inscriptions were all found near Sárnáth, a Buddhist monument about eight miles from Benares. The greater number were dug up within a small space of 10 feet square, and nearly all in an upright position side by side. Along with them were 40 or 50 others now lying near Sárnáth, and which were left behind from their being of the same description as those now presented to the Society, and from their being in a less perfect state, and from their wanting inscriptions.

I learned from a villager that when JAGAT SINGH the Dewan of CHETH SINGH, Raja of Benares, was digging near Sarnath for building materials for the ganj which now bears his name, his workmen lighted on a small temple the walls of which they carried away—and it was within that temple that these figures were then seen; but owing to some superstitious feelings on the part of the workmen,

no steps were taken at the time for their removal.

The three seated female figures, one bearing an inscription, were found in the ruins of a small temple consisting of only two rooms, and the long bas-relief containing the alligator's heads was discovered in a stone tank 13 feet nine inches square, upon clearing away the rubbish from the pukka terrace which surrounded it.

I am induced to offer these figures to the Society, in the hope that the inscriptions upon their pedestals may be translated, and help to throw some light upon the Buddhist religion, as well as upon Sárnáth and the ruins of the different buildings in its neighbourhood."

The special thanks of the Society were voted to Capt. Cunningham for this valuable contribution to the Museum.

Physical.

The Secretary presented on the part of Mr. Dean, Assoc. Mem., some fine fossil specimens lately obtained by him from the bed or banks of the Jumna river.

Mr. Dean had maintained for some time an envoy to explore such parts of the river as he had not been able himself to examine. Out of the produce of this adventure he had selected the specimens now transmitted, because they served to settle the question of the existence of three animals in a fossil state, which had hitherto been doubtful,—or rather which had been for the first time advanced with hesitation from his former collections in the Jumna;—the camel, the buffalo, and the antelope.

They consist of the femur and cranium of the fossil buffalo, about one-sixth larger than the present race;—fragment of the femur of a camel; cores of the

horns of an antelope, and waterworn portions of the horn of the axis.

To make the recognition of these fossils as clear as possible, Mr. Dean had placed side by side of each the corresponding recent bone, so that no doubt could remain of their identity. The splendid discoveries in the Siválik range have meantime removed all uncertainty on the subject, and have even pointed out two distinct species in the fossil camel, on which a paper has just been printed in the Researches.

A paper by Messrs. Falconer and Cautley was submitted on the fossil bear of the Siválik range, with drawings pointing out variations from the existing species.

The knowledge of this animal is derived from two fine fragments of the head. The chief peculiarities are observable in the teeth, which are constructed more after the type of the higher carnivora than any other described species of the genus.

A paper entitled "Some remarks on the development of Pollen," was submitted by Dr. W. Griffith, Mad. Est.

Indications of a new genus of insessorial birds-by Mr. B. H. Hodgson.

A Table of the breadth, current, and depth of the river Satlej, from Hari kē patan to its junction with the Indus at Mithankot, was communicated by Capt. C. M. Wade.

Also a note on the spring of Lohand Khár-by the same officer.

Two large cases containing a fine collection of butterflies, moths and other insects from Silhet, was presented by Mr. George Loch, C. S.

Observations concerning certain interesting phenomena manifested in individuals born blind, on their restoration to sight, were communicated by Dr. F. H. Brett.

REPORT of the Committee of Papers on the ALIF LAILA.

The Committee having deputed the examination of Major Macan's manuscript to those of its Members most eminent for their knowledge of the Arabic language and literature, think it will be more satisfactory to submit the separate minutes of those gentlemen to the Society than to embody them in a general report.

They are unanimous in their opinion of the genuineness, general correctness, and value of the manuscript, as well as in advocating the support of Mr. Brownlow's undertaking: and they think the patronage of the Government should also be respectfully solicited. For the correction of the press, they believe Mr. Brownlow to have made the best arrangement;—nevertheless, as he has solicited permission to publish the work under the auspices of the Society, it may be proper that a file of the sheets as printed should be furnished to the Secretary to be occasionally submitted to Members of the Committee and other competent judges of their accuracy. They consider the price fixed by Mr. Brownlow, 48 Company's rupees, for four royal octavo volumes of 600 pages, to be very moderate, and they trust he will experience the advantage of it in a full list of subscribers.

For the Committee,

J. PRINSEP, Secy.

Minute by Mr. W. H. Macnaghten.

Of the genuineness of Mr. BrownLow's manuscript, there cannot, I think, be the slightest doubt. I have compared the third volume of the "Contes Inedits," by M. TREBUTIEN, with the fourth volume of the manuscript, and, as far as I can judge from reading three or four of the commencing and concluding pages, and looking over some of the intermediate pages of each of the six last tales, I believe that they correspond almost exactly.

I have also carefully looked through the third volume of the MSS. The anecdotes which are at the end of the third volume of the French translation, are contained in this volume; but they do not, in the Arabic MSS, appear to be so numerous. They are chiefly introduced between the stories styled 'Histoire d'Adjib et de Gherib," (the last story of the first volume of TREBUTIEN,) and that styled " Des ruses de Dalilah et de la fille Zeinub," (the first story of the second volume of TREBUTIEN.)

I have not had time to compare all the "Anecdotes." They are not entered in the same order as in the French version, owing to which the comparison would necessarily be a work of time-but I have been able to compare the anecdotes styled "Divorce et second mariage de Hind fille de Naaman," page 464, and that styled " Conduite du Vizier Ibn Aamir," page 487, and I find that they minutely correspond with the Arabic MSS.

On comparing the story styled "Histoire d'Abdallah l'habitant de la Mer et d'Abdallah l' habitant de la Terre*," I was much struck with the mutilated state of the story as contained in the French version. I subjoin a version in English of the French and of the Arabic stories. It will be seen at once, how much the former has been shorn of its fair proportions.

Story of Abdallah the inhabitant of the Sea, and of Abdallah the inhabitant of the Land.

There was once a fisherman, called Abdallah, who was father of a numerous family. All his riches consisted in his nets, with which he went every day to the sea shore to supply the wants of his family; he lived in this way from day to day. His wife was confined for the tenth time of a boy: that very day there was nothing at all in their house. The wife told her husband to take his nets, and to throw to the good luck of the new born. The fisherman took his nets, and threw them in with prayers for the happiness of his son. When he drew them out the first time, they were filled with sand, gravel, reeds, and mud, and he did not find even one single fish. It was the same also the second and third time. In vain did the poor fisherman try another place : the night

overtook him before he had caught the least thing.

"Great God!" cried he, " is this the luck of my new born! has thou created him that there may be no happiness for him! It cannot be so: he who has opened his lips to form a mouth, has taken care of his existence." Overcome with sadness, he threw his nets upon his shoulders and slowly took the way to his dwelling, thinking what he could say to his starving children and his lyingin wife. He passed before the shop of a baker where he was wont to buy bread. Seduced by the smell of the hot bread, poor Abdallah stopped before the shop, and cast looks of starvation on the bread just brought from the oven. " Do you wish for bread?" asked the baker of him. "I would willingly have some for my poor children," replied the fisherman, "but I have no money to pay for it, for I have not caught a single fish to-day: nevertheless, if you are willing, I will leave my nets in pledge." "How," replied the baker, "could you earn money to pay me, if you leave me your nets in pledge? Hold, here are ten loaves, what you are accustomed to take, and, moreover, ten pieces of money which I lend you. If

^{*} Page 89 of Vol. III. of TREBUTIEN.

you are successful in your fishing to-morrow, you will pay me, and if not I will give you credit." "God will reward you," said the fisherman, taking the ten loaves: and he went to the market to huy some vegetables. The next morning he went out very early, and threw his nets all the day without catching any thing. In returning home that evening he did not dure to approach the haker's shop; but the latter having seen him, called him and gave him, as he had done the night before, ten loaves and ten pieces of money. Things went on in this way for forty days, and the fisherman was in despair to see his debts thus increasing without any means of discharging them. The forty-first day he said to his wife, "I am going to tear my nets in pieces; because I see that I ought no longer to reckon on gaining my livelihood in that manner. I am ashamed of being such a burden to the baker, and I must do some other husiness to pay what I owe." "God is great," replied the wife; " and since he has given us such a generous henefactor, he will grant us also the means of clearing ourselves to him. Do not despair then, continue to throw your nets and put confidence in God." The fisherman followed the advice of his wife; he threw his nets in the name of God, and said, "Be favourable to my fishing, O thou who dispensest the gift of destiny! If I catch a single fish I will carry it to my henefactor." The nets this time were of an extraordinary weight. Ahdallah worked with all his strength to bring them to the shore, but the poor fisherman, to his great despair, found nothing hut a dead ass, which exhaled a pestilential smell. "There is neither might nor power, but in God," cried Abdallah, in clearing his nets of the carcase. "It is my accursed wife," added he, "who gave me this fine advice; I told her that I was going to give up the business of fisherman, but no, 'God is great; do not despair, continue to throw your nets.' See what it is to follow women's advice | Nevertheless, I am going to tempt fortune again to-day for the last time."

The fisherman sought another place to avoid the stench of the ass, and threw his nets: they were still heavier this time than the first, and Ahdallah found in them a heing with a human form. At first he thought it was one of those genii that Solomon had cast into the depth of the sea, after having shut them up in brazen vessels. He, therefore, cried "Pardon! pardon! O Genii of Solomon!" "Fear nothing," replied the figure in the net, "I am a human being like thee; the only difference which exists hetween us, is that I live in the depth of the sea, and you inhabit the earth." "Then," replied the fisherman, reassured by these words, "you are neither a genii nor a demon?" "Not more the one than the other," replied the inhabitant of the sea; "I believe in God and his Prophet." "But who threw thee into the waves?" I am, by nature, an inhabitant of the sea, and I serve God. When I was caught in the nets, I was trying to he useful to thee, and I allowed myself to be taken; because it would not have heen difficult for me to break your nets, if I had wished to escape; but I recognized the finger of God in this event, and I see that we have both been created to he hrothers and friends. The earth produces grapes, melons, peaches and pomegranates: the sea abounds in coral, in pearls, in emeralds, and in rubies. Bring me fruit, and I will fill your basket with the precious stones which are found in the sea." "This proposition suits me marvellously, my brother." said the fisherman; " swear to me that you will keep your promise, and recite the first chapter of the Koran," When the first chapter was recited, the fisherman laid down his nets, and asked his companion his name. "I am called Abdallah of the sea; and thou, what is thy name?" "It is truly extraordinary," said the fisherman; "my name is also Abdallah, and to distinguish us one from the other, I will call myself Abdallah of the land." "Very well," replied Abdallah of the sea; "we have been created one for the other; -wait for me here an instant, I am going to search for something which I wish to make you a present of!" At these words he plunged into the sea to the great grief of the fisherman, who regretted having given him his liberty. "If I had kept him, thought he to himself, I could have shown him for money as a curiosity, and in that manner I might have gained my livelihood."

An instant after the inhabitant of the sea re-appeared, with his hands filled with rubies, pearls, and emeralds. "Do not take itill," said heto the fisherman, "that I have not brought you more of them; I had nothing to put them in, but I will

give you as many to-morrow again, and every day, if you will come here at sunrise." Transported with joy, the fisherman went to the baker's, to whom he gave all his pearls and precious stones, thanking him for all the favors which he had hitherto heaped on him. After that loaded with as much bread as he could carry, and after having bought with the money which the baker had given him, meat, fruit, and vegetables, the good Abdallah ran home to inform his wife of the happy adventure which had happened to him.

"Keep well your secret," said his wife to him; "it is a thing that ought not to be related to every one." "If I must conceal it from every one," replied the fisherman, "I cannot at least make a mystery of it to the baker my bene-

factor."

The next day, having got up very early, the fisherman went with a basket of fruit to the sea shore, which he reached before sun-rise. He cried there: "Where art thou, Abdallah of the sea?" "What will you?" replied a voice from the depth of the waves; and at the same instant the new friend of the fisherman came out of the sea with a load of emeralds, rubies, and pearls. After having hreakfasted together, they retired each going his own way. The fisherman gave, in passing, two more necklaces of pearls to the baker, and carried the rest home. He went afterwards to the bazar, and shewed all the pearls and precious stones to the syndic of the jewellers. "Stop him," cried the latter; "he is the thief who has stolen the queen's pearls !" Abdallah allowed himself to be loaded with bonds, and to be conducted before the king without saying a word. They presented to the queen the pearls which they took for hers, but she declared that the pearls were much handsomer than those which had been stolen from her; that they did not helong to her, and that she would buy them at any price. "Retire, infamous informers," said the king; " as if God could not give riches to the unfortunate also! Retire." When the jewellers had departed, the king turned towards Abdallah: " Now inform me from whence did you get this treasure. I am a king, and I do not possess such precious stones." Then Abdallah related to him his connection with Abdallah of the sea. "Venerable man," said the king, "riches ought to be joined to power; -aslong as I reign you need not fear violence; but I would not be answerable that after my death my successor will not cause you to be put to death to seize on your treasures. I wish, therefore, to give you my daughter in marriage and to make you my vizier, so that after me envy may not assail you." After that the king ordered Abdallah to be conducted to the bath, and caused him to be dressed in magnificent clothes. They sent letters for his wife and children, who were loaded with marks of honour. The contract of marriage was drawn up according to all the forms. Abdallah of the land gave as portion to the princess all the treasures which he had received from Ahdallah of the sea. The next day the king having observed the vizier betake himself with a basket of fruit on his head to the sea shore, asked him what he meant by so doing. Ahdallah replied that he was carrying breakfast to Abdallah of the sea. The answer displeased the king. "This conduct, my son-in-law," said he to Abdallah, "is not suitable for a vizier. Take your choice to remain in the palace, or to drop instantly your load."

Up to this point the French and Arabic versions correspond with great minuteness. The French version, however, terminates in a very abrupt and unsatisfactory manner. It conveys no moral, and leaves Abdallah the inhabitant of the land to enjoy his good fortune, notwithstanding his ingratitude towards his benefactor. The French version proceeds—"Abdallah liking better to preserve his place and the favour of the king, returned no more to the sea shore and lived happily to the end of his days."

The Arabic version is altogether different, and if it possesses no other merit, it has at least the advantage of conveying a moral and teaching a cheerful resignation to the will of Providence: it proceeds thus:—

"Abdallah said, I fear to break the promise which I have made to him. I shall then he accounted a liar, and the world will accuse me of falsehood." The king replied, "You are right. Go, and God he with you." He then went into the city, and the people recognized him. He overheard them saying, "This is the

king's relative: he is going to exchange fruits for jewels;" but they who were ignorant and were not acquainted with him said, "O fortunate man, stay a little. and let me form acquaintance with you." He paid no attention, however, to any one, and proceeded onwards till he joined Abdallah of the sea, and presented him with the fruit and exchanged them for jewels. Having so done, he returned to the baker's shop, which he found closed, and learnt that this had been the case for ten days. He then proceeded to consummate bis marriage with the daughter of the king, with whom he lived on terms of affection. He went daily to the man of the sea and returned by the baker's shop, but found it always locked. He was at a loss to conceive where the baker had gone, and asked the neighbours where he had gone, and what had happened to him. They told him in reply, that the baker had fallen sick and could not leave his house. Having inquired where his house was situated, Abdallah sought him out. His friend seeing him out of the wiudow bearing a full basket, on bis head, descended and opened the door, and throwing himself upon him, embraced him and cried. Upon this, Abdallah said to him, "Where have you been, my friend, this long time; I have come daily to your shop, but have found it shut, and have been unable to find you. Are you in distress?" The baker replied, "No, but I heard that the king had seized you and charged you with being a thief, whereupon I became afraid, and shut up my shop and concealed myself." Abdallah answered, This is true; and then recited his adventures with the jewellers and the king, and how he had married the king's daughter, and had been made his vizier. He further desired him to take as his portion what was in the basket, and not to be afraid. Saying this, he left him in a happy mood, and returned to the king with his basket empty. The king said to him, "O! kinsman, I fancy that you could not have met your friend Abdallah of the sea to-day." He replied, "I did meet with him, but what I obtained from him I gave to my friend the baker, to whom I am under an obligation." 'The king asked who is this person—to which he replied, he is a baker by profession, and behaved to me in such and such a manner during the period of my distress, and never neglected me. The king asked his name. Abdallah, said he, is called Abdallah the baker-my name is Abdallah of the land, and the name of my companion is Abdallah of the sea. The king rejoined, My name also is Abdallah*, and the servants of God are brothers; send and bring him, we will make him our second vizier. Then were sent for him the vizier and the nobles, who caused him to be clothed in the habiliments of a vizier, and brought him into the presence of the king. He was then made the second vizier, Abdallah continuing the first.

Abdallah of the land, the first vizier of the king, continued after this fashion a whole year, and never omitted for a single day to go with a basket of fruits and to return with a basket of jewels and precious stones, and when fresh fruits were not procurable he used to carry raisius, almonds, walnuts, figs, and such like. Whatever he took was cheerfully accepted, and in return his basket was filled with jewels according to custom. One day it happened that he took a basket of sweetmeats. Abdallab of the sea accepted it, and took his seat upon the land by the sea shore. They entered into conversation and mutually told stories, when the following dialogue occurred. "Is it true, my brother, that the prophet (on whom rest the peace and blessing of God!) is buried among you on dry land, and do you know where he is buried? I do, replied he of the land. In a city called Yusrub. Do the inhabitants of the land go to visit his tomb? Yes. Happy then, exclaimed Abdallah of the sea, are you denizens of the earth, that you are enabled to visit the tomb of this gracious, clement and merciful prophet who intercedes for all those who perform the pilgrimage! Have you, my brother, ever visited his tomb? No, I was a poor man and had not enough to pay my expenses on the road, but since I became acquainted with you and you have bestowed upon me this exceeding prosperity, it is a duty incumbent upon me to do so. I have a strong desire to visit the holy city, and nothing but the affection I have for you prevents my doing so. I canuot, however, bear to part with you for a single day. Do you, said he of the sea, prefer my friendship to that of the prophet (on whom be the blessing and peace of God), who will

plead for you with the Almighty on the day of resurrection? who will save you from the fire, and give you admission into heaven by his mediation? Do you abandon the pilgrimage to the shrine of the Prophet Mahomed, (on whom he peace and blessing of God) through love of the world? To this he of the land replied, "No: I swear that I should prefer the pilgrimage to all things; I only require your permission to perform it this very year." "I have granted you permission," rejoined he of the sea; "but when you arrive at the shrine, submit my salutation. I have an offering to present. Enter with me into the ocean, so that I may take you to my city and admit you to my house—that I may entertain you and entrust to you my offering, in order that you may present it at the shrine of the holy Prophet, saying, This is an offering from Ahdallah of the sea, who conveys his salutation, and intreats your intercession to save him from hell fire."

The story proceeds to state that the fears of Abdallah of the land having been removed by the assurances of his companion, and his body having been rubbed over with a certain ointment which gave him the power of living in the water, he entered the ocean with his marine friend. Then follows a long description of the wonders of the deep; Abdallah having seen "wedges of gold, great anchors, heaps of pearl, inestimable stones, unrivalled jewels—all scattered in the bottom of the sea"—and many other things undreamt of even by CLARENCE. The story concludes thus:-

Having taken leave of the king of the ocean loaded with jewels, Abdallah of the sea took his companion hack towards his city. On the road he put into his hand a packet, saying, Take this, and present it as my offering at the shrine of the holy prophet. Abdallah of the land took charge of the packet without knowing what it contained. Abdallah of the sea then proceeded to convey him to the shore, hut ou the road there appeared an assembly of persons rejoicing and singing, and eating and making merry. Upon witnessing this, Ahdallah of the land said to his companion, "For what are these people rejoicing? Is there a marriage among them?" His companion answered, "No-but some one among them has died." "What," said he of the land, "do you eat, drink, and make merry on the occasion of a death?" "To be sure we do," said the inhabitant of the sea: "do not you do the same on land?" ". Not we indeed," said his companion; "on such occasions we cry and weep, and the women heat their faces and tear their clothes, and make all sorts of lamentation." On hearing these words, Abdallah of the sea exclaimed, " Deliver up my offering." This he did with fear, and having got upon dry land, Abdallah of the sea said, "I have parted with your friendship-you shall never see me again, nor shall I ever again hehold you." "On what account is this?" asked his companion. "It seems then," replied Ahdallah of the sea, "that you dwellers upon earth, whose life is a mere deposit by your Creator, cannot endure its heing taken back, but you must weep thereat. What then would be the case with my deposit for the Prophet? When a child is born you rejoice that God Almighty has endued it with life as a deposit, but when that is taken away again you feel it as a grievance, and you cry, grieve, and lament. I have no occasion for such company." Saying this he vanished.

Abdallah of the land having put on his clothes and taken his jewels, proceeded to the king, who received him with much joy and gladness, and asked him how he was and what had befallen him. Abdallah theu recounted his adventures, and mentioned all the wonders of the deep which he had seen. The king was astonished, but upon hearing what Abdallah of the laud had said to him of the sea, the king observed that the former had erred in making the communication which he had done. For a long time afterwards Abdallah continued in the habit of going to the sea shore and calling upon his former companion, hut he

never re-appeared.

The king and his friend lived happily until the destroyer of delights-the spoiler of all things came, and they both died. Then praise he to God who never dies, who is the living God, Lord of kings and angels, and who has power over all things !

At the conclusion of the tale which immediately precedes the above, and which is styled "Histoire D'Aboukir et D'Aboussir," M. TREBUTIEN'S version, is, "Aboussir le fit inhumé et lui eleva un monument sur lequel on grava une inscription qui renfermait un sens très moral." In the Arabic MS. the inscription is given at full length. I here subjoin a translation of the Elegy, which is not without elegance in the original, but which seems rather intended to inculcate the advantage of prudence, and to convey the moral that "honesty is the best policy," than as a suitable epitaph on the tomb of the treacherous friend over whom it was erected. After a series of efforts to ruin his friend and benefactor, the treacherous man came to an untimely and ignominious end, while he whom he designed to ruin, and who buried his corpse (which was found tied up in a bag on the sea shore) attained the summit of prosperity.

"By his deeds a man is known among his equals.

"The qualities of a free-horn and noble person resemble his origin.

"He does not revile, though he be reviled;

" For how often what a man says recoils upon himself.

"Abstain from evil words and use them not, whether engaged in serious or trifling matters.

" How many a great man has been subjected to abuse,

" From one whose value is not equal to a fragment of his shoe!

"What is triumphant exultation? even the lion is taken in the toil through ignorance.

"The sea bears on its surface the rotten carcass. But the pearl lies resplendent in its lowermost sands.

"I never saw a sparrow oppose a hawk, but I thought of its insignificance and want of understanding.

"It is written on a lofty pillar in Hindustan, Whoever cultivates virtue shall be recompensed in the like.

"Abstain from the attempt to make sugar of coloquintada; "For every thing must partake of the nature of its origin."

Scott, in the Preface to his translation of the Arabian Nights Entertainments, has observed, "The stanzas, elegies, and other poetical quotations which so frequently occur in the original, M. Galland has indeed omitted, but such omission (at least in the humble opinion of the Editor) is not to be regretted, for he thinks that to the European reader their insertion would have been an intolerable interruption to the narrative."

M. TREBUTIEN does not seem to have been generally of this opinion, for he has on most occasions faithfully rendered the verse as well as the prose. Where he has not done so, the fault, I suspect, was in the original

-not in the translation.

I have compared the MS. of Mr. Brownlow with the printed edition of Habicht and the lithographed work edited in Calcutta, as well as with Scott's and Galland's translations. The comparison was made with one of the old tales, and I took at random the first voyage of Sindbad the Sailor. This examination has afforded additional proof of the genuineness of Mr. Brownlow's MS. M. Habicht's edition comes next to it in fulness and accuracy. The Calcutta edition is very faulty and defective.

I cannot help thinking that an entire and correct translation into English of these beautiful stories is still a desideratum, and that no better original could probably be procured than that belonging to Mr. Brownlow. Scott's, which is the best translation, seems very inaccurate. Take for instance the following passage in the story of Sindbad the Sailor.

Reflecting on the time he had lost and the profligacy of his past life, he says that he called to mind the saying of Solomou, that three things are better than three things: "The day of death than the day of birth—a

living dog than a dead lion—the grave than a palace."

This has been translated by Scott, "I remembered the saying of the great Solomon, which I had frequently heard from my father, that death is preferable to poverty."

I leave to other Members of the Committee the task of examining the first two volumes of the MSS.; if indeed any further examination be thought necessary to establish the genuineness of the work. I am quite satisfied as to that point, from the examination which I have made of the third and fourth volumes. The stories of Sindbad the Sailor are introduced at the commencement of the 3rd vol. of the MSS.; consequently it may be assumed that the "Contes Inedits" which I have not compared are to be found in the first and second volumes of the MSS. and a comparison of them with the Arabic might be still more satisfactory.

Upon the whole, I have no hesitation in stating my opinion, that the MS. copy of the Alif Leila now submitted to the Society is a most valuable addition to the literature of the East, and worthy of every encouragement. I have little doubt that the work would find a ready sale both in Asia and in Europe. I do not helieve that Mr. Brownlow requires any pecuniary aid from us. As a Society, we might subscribe for a certain number of copies, and individually I should hope we shall not withhold our aid from this highly public-spirited and meritorious undertaking. To Government, I think, we should make an earnest appeal for support, founded on the credit which must accrue to our nation, from presenting to the Mussulman population of India, in a complete and correct form and in their own classical and beautiful language, these enchanting tales, which even in the estimation of Europe enjoy almost unrivalled celebrity.

Our Maulavi, if competent, might be desired to assist in correcting the press, and I for one should be very happy to aid in this duty, as far

as my limited abilities and leisure might permit.

Sept. 20, 1836.

W. H. MACNAGHTEN.

Minute by Mr. H. T. Prinsep.

I have examined the four volumes of the Alif Laila as far as my time would permit, and am able to confirm entirely the testimony given by Mr. MACNAGHTEN in favor of the accuracy and completeness of the copy. So far as my examination has gone, the tales and anecdotes given in the list at the commencement of the first volume of the "Contes Inedits" are all to be found in the Arabic, and those that have been translated are more full and complete in our copy than in the French version. I did not find the numbering of the nights exactly to correspond. Thus the anecdote of Zobeide in the bath is between the 382nd and 383rd nights, and the secret entrusted to the wife at the end of the 384th; whereas, according to the French list, these ought to have been found first in the 384—385th, and the other in the 387—388th night.

The French version of the "Contes Inedits" is not, it is to be observed, a very close translation; nor does it give in regular order the tales omitted by previous translators. It is still merely a selection, and made not exclusively with reference to merit or the interest of the tales. It is evident, however, that the original must have corresponded very closely with the copy brought to India, by Major Macan, and was prohably from the same. Whether it was as complete in all respects, and as carefully made, may well be doubted; for the getting up of this manuscript is of a very superior description. I do not find that the German edition in the original Arabic corresponds exactly in the arrangement of the tales with our copy, but the text does not materially differ of the same tales, which is an additional confirmation of the accuracy and genuineness of the very complete set of these tales now laid before us.

I join heartily in the wish expressed by Mr. Machaghten, that a complete edition of this work in the original Arabic may be printed in this country from Major Macan's copy, and I doubt not that many subscribers

may be found to contribute towards the expense of carrying it through the press, if this should be deemed necessary. The offer of Mr. Mac-NAGHTEN to correct the press with the aid of the Maulavis of the Persian office, is one that will be appreciated by all who wish well to the literature of the East, and it ought to determine those who hitherto have felt hesitation at the idea of attempting so great a work.

I am afraid that no capable person has leisure here in India to undertake the translation of these four volumes into English. But certainly it would tend equally to the credit of our literature were it possible to put this also in hand. Were I myself an idle man, I should like no better

amusement than to take up such an occupation.

Sept. 25, 1836.

H. T. PRINSEP.

Minute by the Rev. Dr. Mill.

I entirely agree with Mr. Macnaghten and Mr. H. T. Prinsep as to the undoubted genuineness of Mr. Browntow's MS. The style of these tales is very strongly impressed on the memory of every one who has read any large portion of them in the original: and on comparing the detached portions I have read from this MS. during the three days it has been with me, with the recollections of the Voyages of Sindbad which I have repeatedly perused from M. LANGL'ES' edition (Paris, 12mo. 1814) -there is the same delightful ease and simplicity of style, with the total absence of the rhetorical effort so general in other works of imagination in the same language,-the same purity of Arabic idiom, with the free introduction of

e. g. the Persian Sharáb- foreign nouns, which (even independently of the khánah and our own well known Mosál-jée (an Arabic participle with a Turkish termination) which I observe in Night 284, vol. 2, of this MS.

from which M. TREBUTIEN'S "Contes Inedits' are published, than to the Tunis MS. from which M. HABICHT's complete edition of the original is now publishing at Breslau; and for this reason, amongst others, I do not think that work need preclude the publication of this.

external evidence) bears witness to the common

origin of all. This MS. is apparently much

closer in its order and readings to Baron Von

Hammer's Cairo MS. (bought at Constantinople)

The part which I have taken almost at hazard for critical examination, is the part shortly preceding that which has been so ably examined by Mr. Macnaghten. It is the curious adventure (near the beginning of the 2nd volume) of Isaac of Mousul the musician, and the consequent introduction of the Khaliph Mámún to his future bride, the daughter of his Vizier Hasan ben Sehl. This occupies from the middle of Night 277 to 280 in the MS., but from 279 to 282 in Trebutien, (this slight difference arising rather from a different division than from any deficiency in this MS. as the collation of the preceding tales shews.) A comparison of this story with the same in Trebutien's third vol. (p. 289— 295,) has convinced me that the text of MACAN'S and HAMMER'S MSS. is as nearly identical as those of any two ordinary MSS. of an oriental work, and that whatever discrepancies appear between the Arabic and the French in this part at least, arise from the translator rather than from his text. An example or two will best prove this.

MS. (literally translated.)

There appeared something hanging from the adjoining houses, and lo ! a large basket decked with silk at the four handles. I said to myself, "Surely there is a cause for this," and I remained amazed at my adventure. But intoxication Trebutien.

Je regardai ce que ce pouvait être, et, à ma grande surprise je vis une sorte de corbeille garnie de soie. Comme le vin que j'avais bu dans la soirée m'avait un peu troublé le cerveau, je me plaçai dans cette corbeille so far transported me, that my mind said to me, "Sit down in it." Accordingly I sat down, and when those who let down the basket to me felt I was within, they drew it up to the top of the wall: and behold four damsels who said, " Alight freely and without restraint." And one of them walked before me with a taper till I entered into a house: and there were sitting rooms strewed out such as I had never seen even* in the Khaliph's palace.

sans savoir ce que je faisais, et au même instant je me sentis enlever en haut. Je fus reçu sur la terrasse par quatre belles esclaves qui m'engagèrent à descendre dans la maison. L'une d'elles marcha devant moi, un flambeau à la main, et me conduisit dans une salle, dont la magnificence ne pouvait être comparée qu'à celle des appartemens du palais du Khalife.

To the method so apparent in the above extract, of seizing only the points of the narrative, and neglecting the orientalisms of style and manner by which they are introduced, I should ascribe even the places where the two copies appear discordant; as, where in Trebutien (after the long interview with the lady described in substance exactly as in the MS.) Isaac is made to go down by the basket as he came: - "On me descendit dans la corbeille;" whereas the Arabic MS. distinctly says in that place, "A damsel went down stairs with me and opened [the door] to me, and I went out and walked to my house." (Night 279): where it seems to me at least as probable that the translator hastening with the story after his manner, left out the circumstances of descent and added "dans la corbeille" afterwards, on revising his French, than that he found the basket in his original. The conclusion of the story furnishes another striking example of his manner, and of the disadvantage which these tales suffer by being so translated.

MS. (literally.) Then we went out: and he said, "O, Ishak, do not tell this story to any one;" so I concealed it till the death of Mamun. Never had any one an interview such as I had during these four days, sitting in the day with Mamun and in the night conversing with Khadijá. By Allah I never saw any one of men like Mamún, and never did I behold a woman like Khadijá, who even approached her in wit and understanding and eloquence. But God knows best.

the other side.

Trebutien.

Nous sortîmes de la maison, Le Khalife m' ordonna de ne pas parler de ce qui venait de se passer; et j'en ai gardé le secret jusqu'a sa mort. Ces trois nuits, dit Ishak de Mossoul, je les mettrai toujours au rang des plus agréables que j'aie jamais passées dans la plus aimable société.

Similar conclusions were obtained by comparing the preceding story in the 2nd volume of the MS .- the adventure of Abdallah the son of Abu-Kolába, and his discovery of the paradisiacal city of Sheddad the son of Ad-occupying from p. 284-289 of Trebutien (who calls him Abdallah, son of Kotaiba, and with whom his nakah or she-camel is a mule). The text of the two Egyptian MSS. of M. TREBUTIEN and Major MACAN must be almost entirely the same.

Very different, however, is the text of Professor Habicht's edition, which, if it contains either of the above "Anecdotes" of M. TREBUTIEN, must place them in a very different place from that in which the numbers led me to search for them without success. And this is not wonderful, as the arrangement of the nights is altogether different in the two editions. For example, the Voyages of Sindbad in both the Egyptian MSS. (MS. vol. 3, and TREBUTIEN, Preface p. xlvi.) occupy night 536-565, but in the Tunis MS., Night 250-271, as appears in Habicht's 3rd and 4th volumes.

* The discrepancy from the French may here very probably arise from the omisby the copyist—but the mistake may just as probably lie on On the other hand, the first of the unpublished Tales in both the Egyptian MSS.—where it occupies from Night 34—38 (MS. vol. 1 and Treb. p. xli.) occupies all from the 139th to the 218th in Habicht (iii. 66—166). It is not, however, actually longer in the latter than in the former: and as this tale, viz. the History of the two Viziers of Mohammed Ibin Soleman Alzini [in Habicht "Alrasi"] has never been translated either by Galland or Trebutien, I selected it for the collation of the two Arabic texts. Here, though I found the printed and MS. text to tally in the main from beginning to end, not only as to the succession of incidents, but in the poetical passages interspersed throughout, the variations were very considerable both in the prose and the verse: whole clauses appeared in the one which were not in the other; the advantage of fullness being sometimes on the side of Mr. Brownlow's MS., but more frequently on that of the Breslau edition.

On the whole, I should strongly recommend the publication of this text without any reference to that of M. Habicht—even in the parts which might be compared with advantage. (Mr. MACNAGHTEN's offer of assisting in the correction of the press is one which should be most thankfully embraced, however learned may be the Maulavi engaged for the purpose.) When both texts shall have been published, (belonging, as they do, apparently to two very different editions or recensions of these celebrated tales, one long current in Egypt and Arabia, the other among the Maghrebin Arabs of Barbary and Spain,) they may enable the critics of Europe to form perhaps a judgment as to the true original text of both. The work of a translator is one of greater difficulty; and we have none probably in India, possessed at the same time of ability and leisure for a work of this description. The ease and vivacity of M. Galland's translation, so deservedly popular among Western readers, would be a good model for imitation-avoiding, however, his liberties with his original, except, indeed, in the too frequent cases where decency requires curtailment or omission. M. TREBUTIEN is far more faithful in giving the whole of his original: but in the mode of representing it, a due medium between his too occidental style of paraphrase, and a servilely literal version of the Arabic text, would be, in my opinion, at the same time more accurate and more pleasing.

W. H. MILL.

Minute by Mr. J. R. Colvin.

I have no pretensions to the name of an Arabic scholar, and shall not presume to offer any opinion of my own on the genuineness of these volumes. But I can bear testimony to the late Major Macan's opinion of their genuineness. He was a highly competent judge, and had made inquiries which satisfied him on the point before he bought the manuscripts in England.

I cordially join in the wish to give encouragement to the publication of a complete edition.

J. R. Colvin.

Minute by Mr. C. E. Trevelyan.

Neither have I the least pretension to be called an Arabic scholar, but it is not necessary to be one in order to appreciate in some degree the beauty of the Arabian Nights. I think it very desirable that a correct version of the original Arabic should be published, and still more so that it should be well translated into English. Such a translation, if it were well executed, would be a most valuable accession to English literature, and I believe that for one person who would read the book in Arabic, five hundred would read it in English. Nobody, in my opinion, is so eminently qualified for this task as Mr. Macnaghten, and if he could be persuaded to undertake it, he would lay every person who reads English under an obligation to him.

C. E. Trevelyan.

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